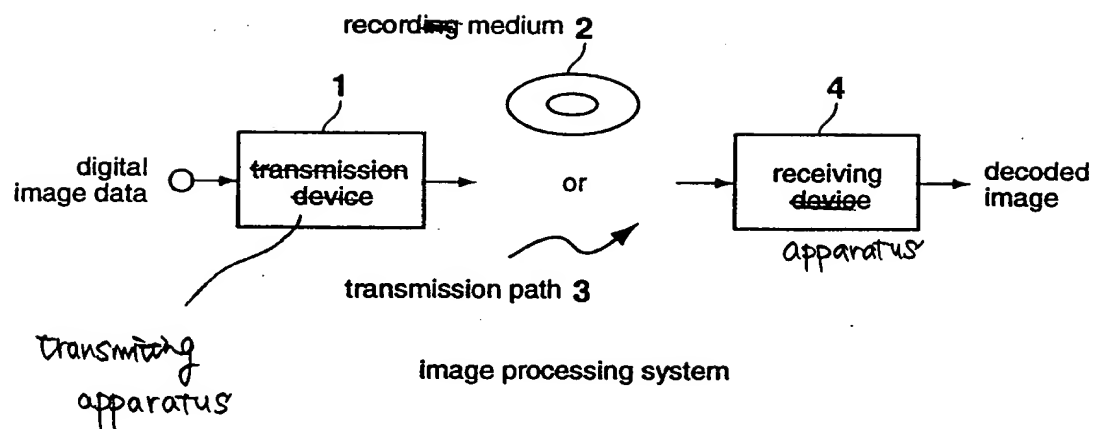


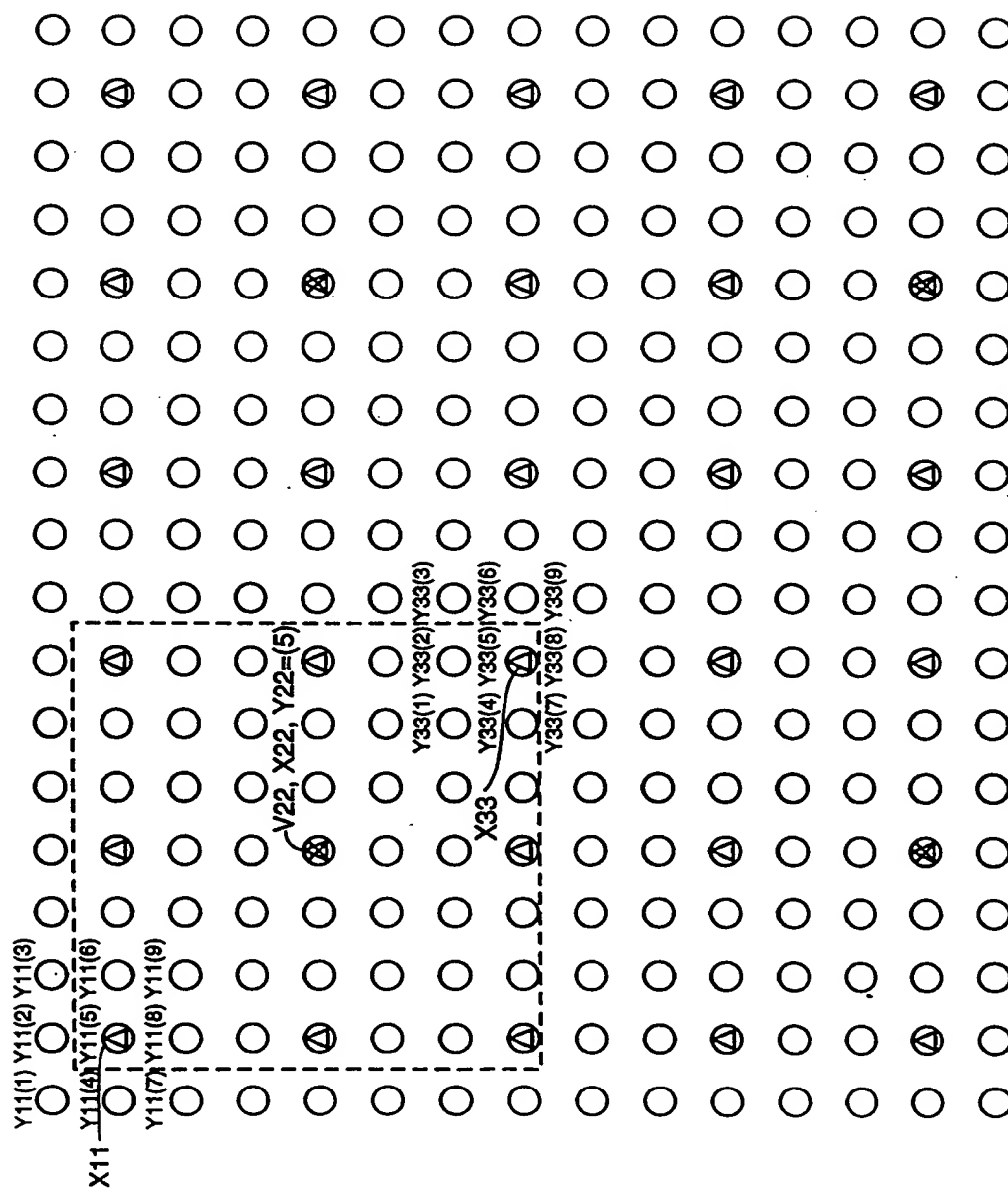
[FIG. 1]



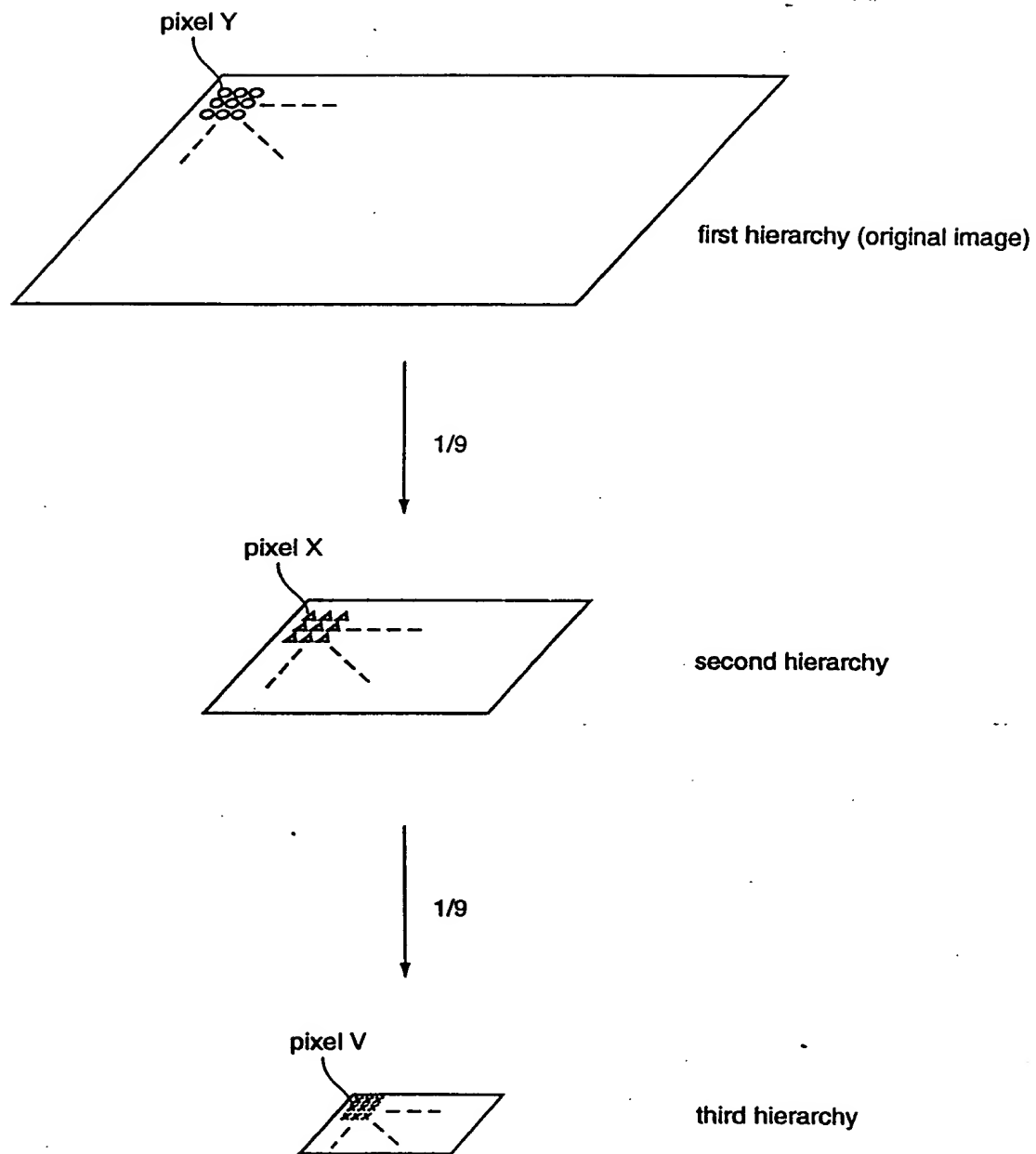


[FIG. 3]

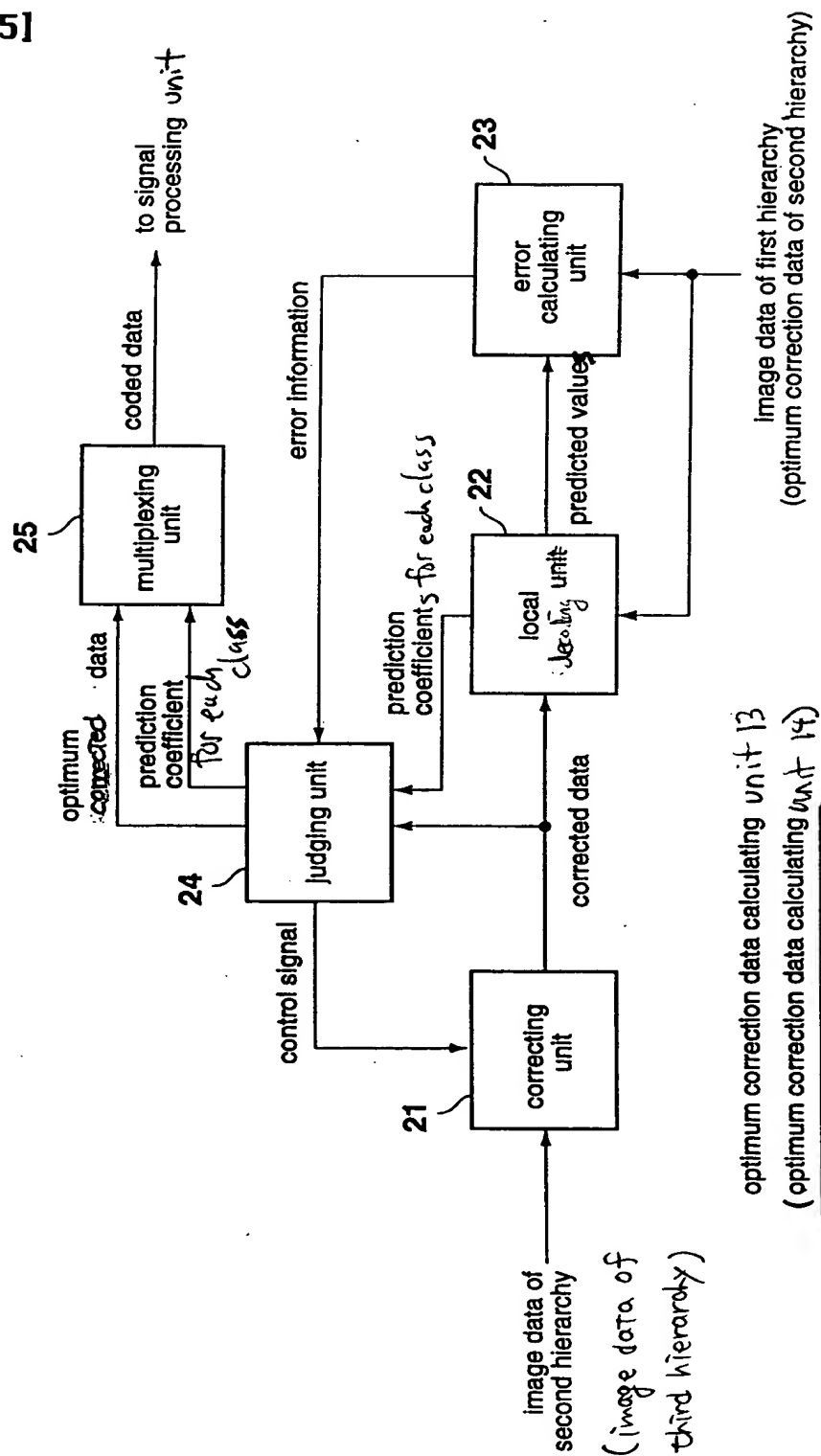
○ .....Y<sub>ij</sub>  
 △ .....X<sub>ij</sub>  
 × .....V<sub>ij</sub>



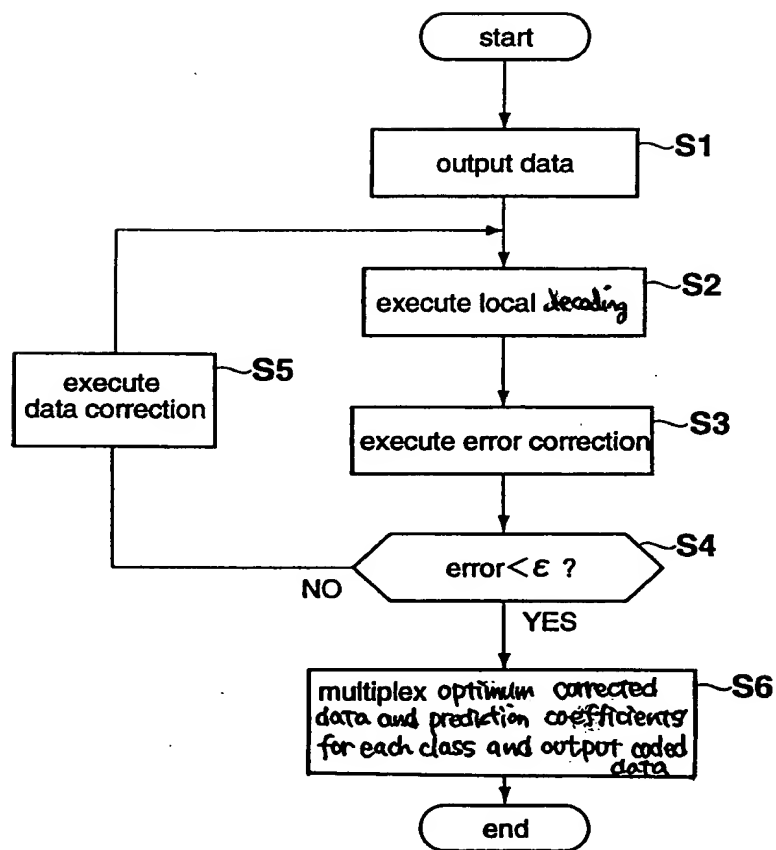
[FIG. 4]



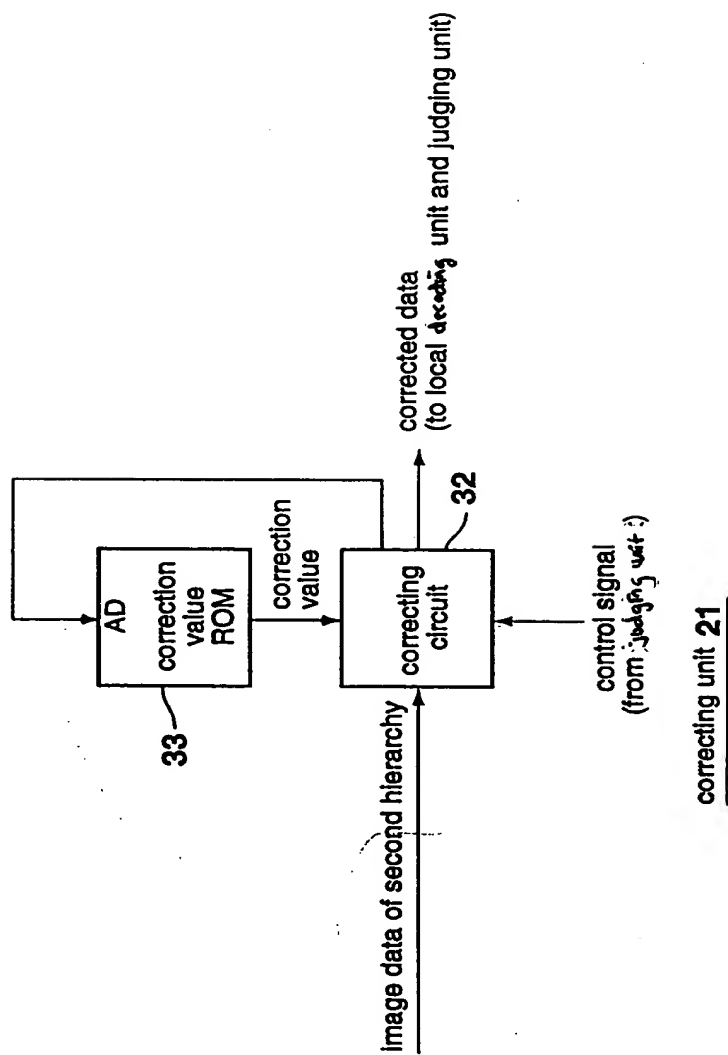
[FIG. 5]



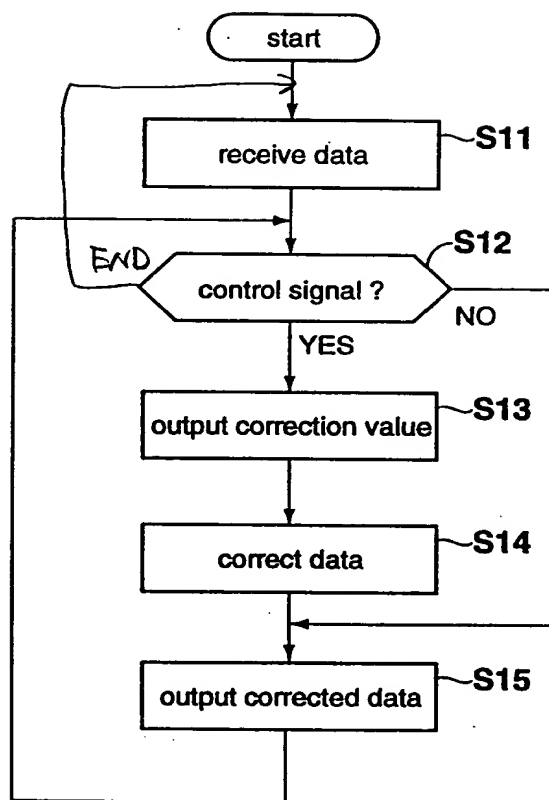
[FIG. 6]



[FIG. 7]

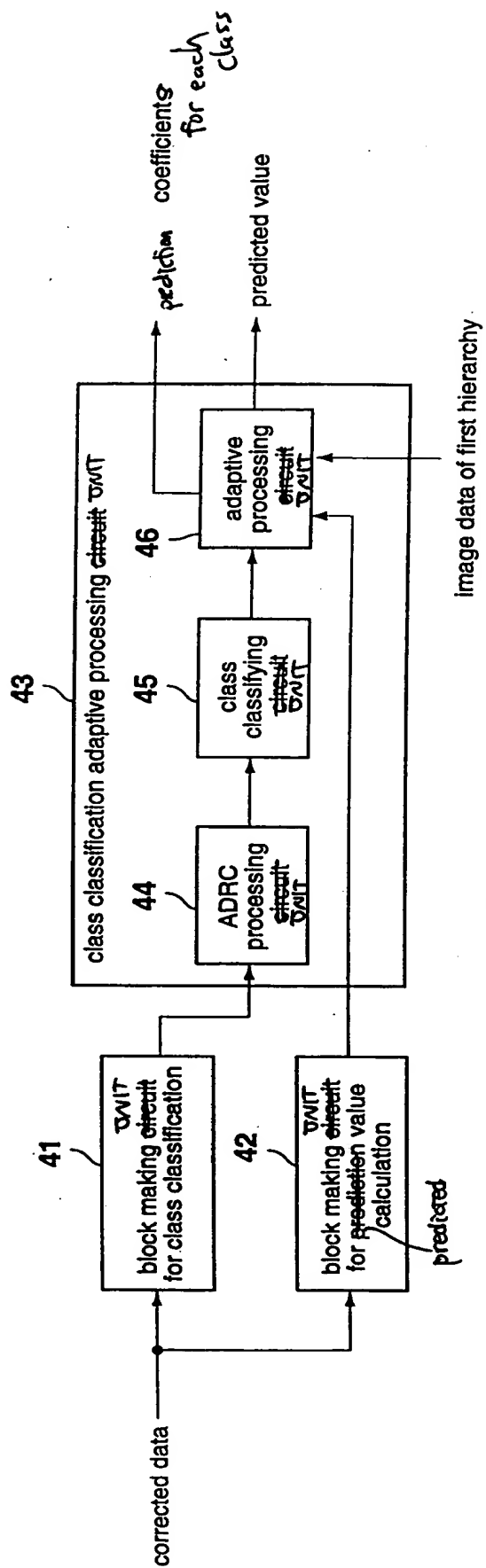


[FIG. 8]





[FIG. 9]



local decoding unit 22



FIG 11A

pixel of interest

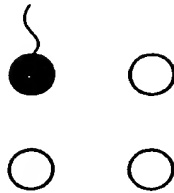
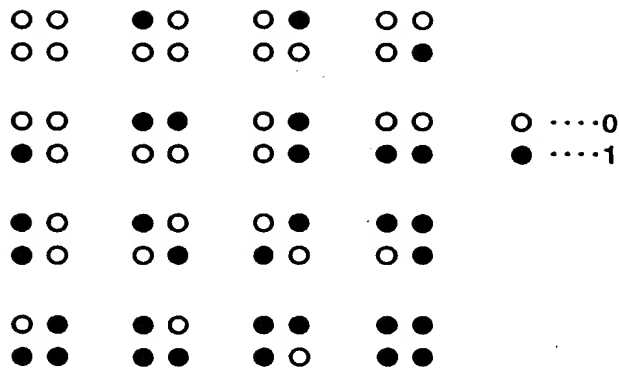


FIG. 11B



class classification process

FIG. 12 (A)

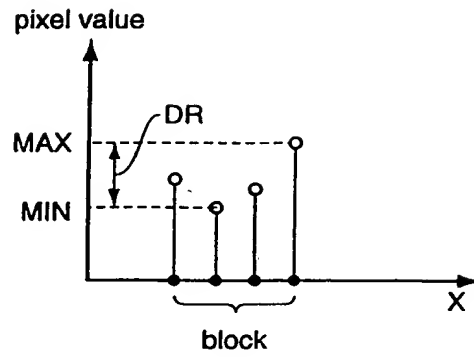


FIG. 12 (B)

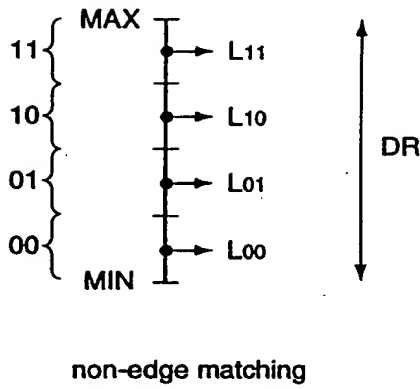
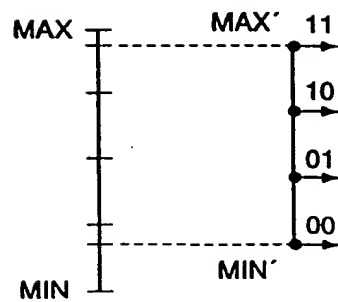
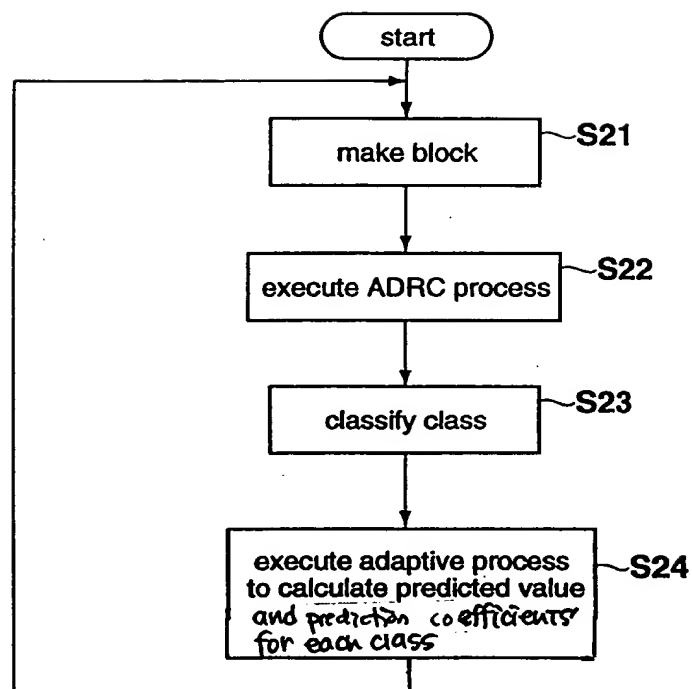


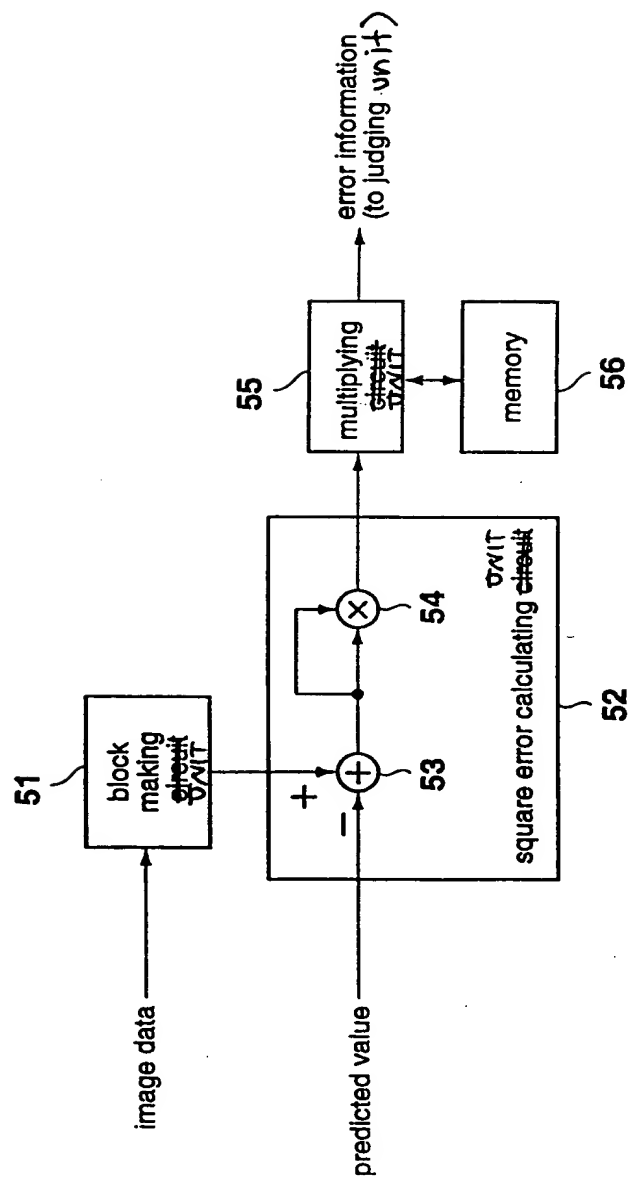
FIG. 12 (C)



[FIG. 13]

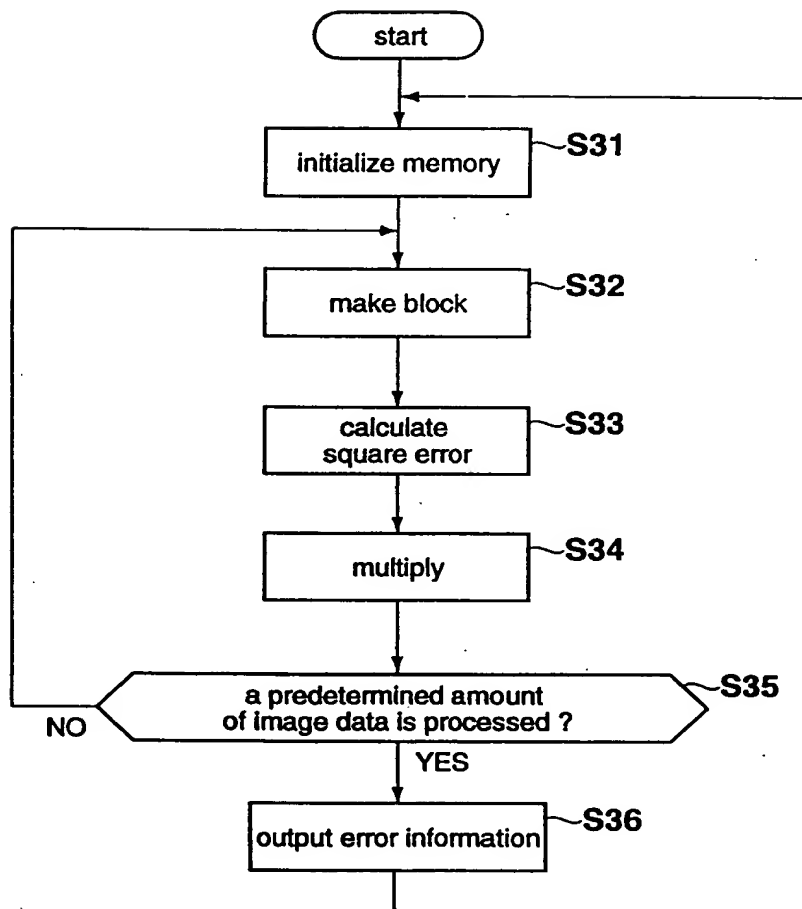


[FIG. 14]

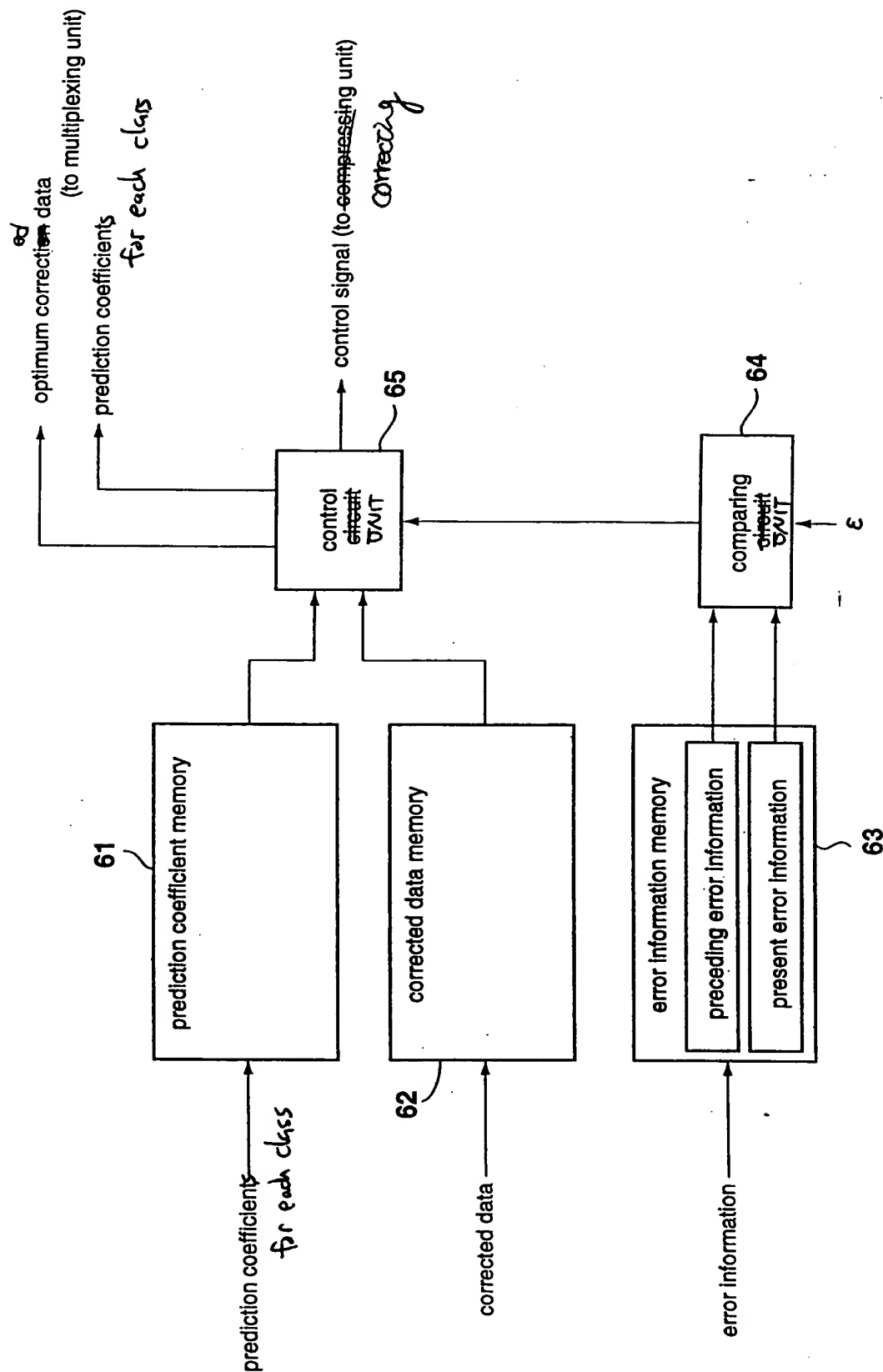


error calculating unit 23

[FIG. 15]

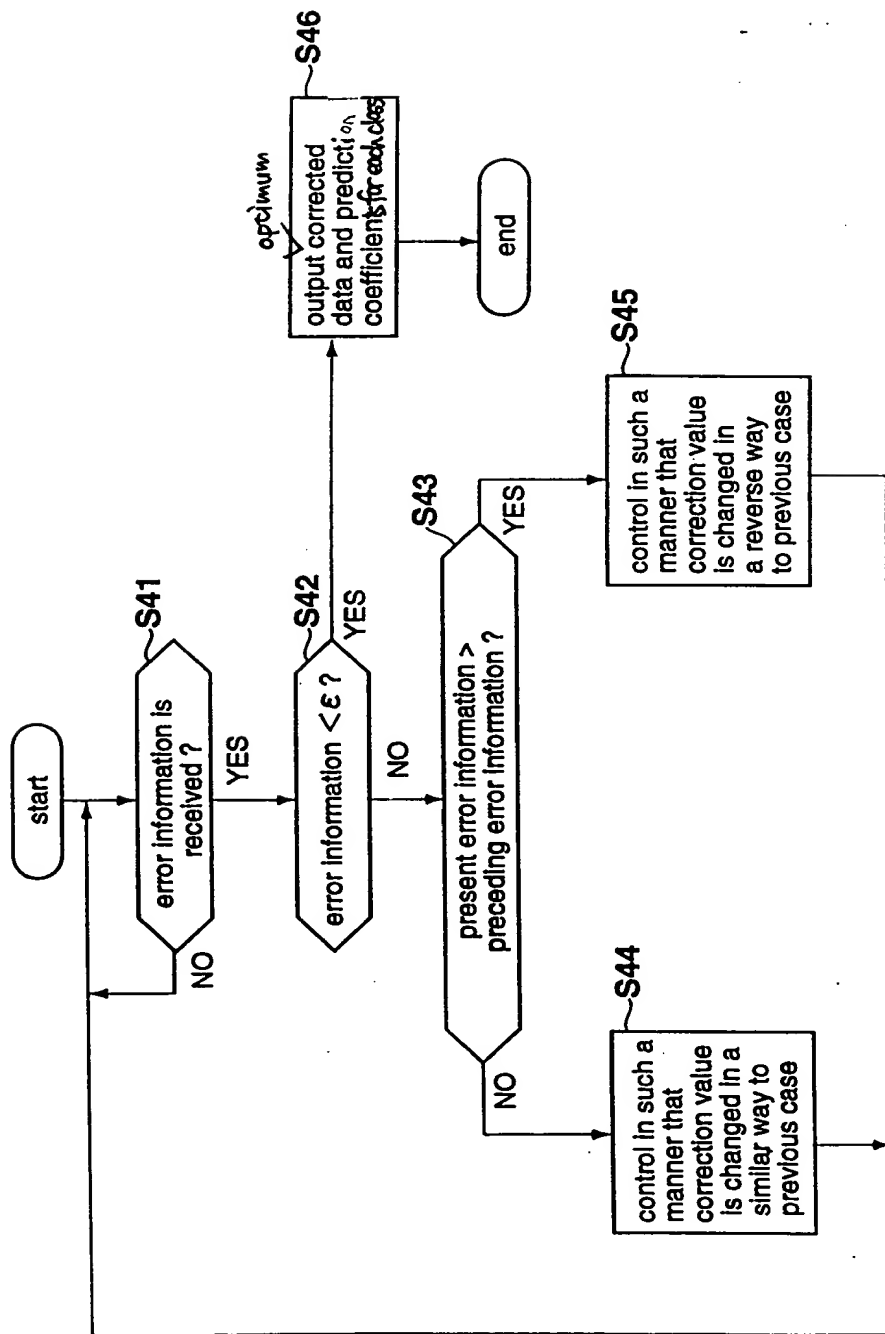


[FIG. 16]

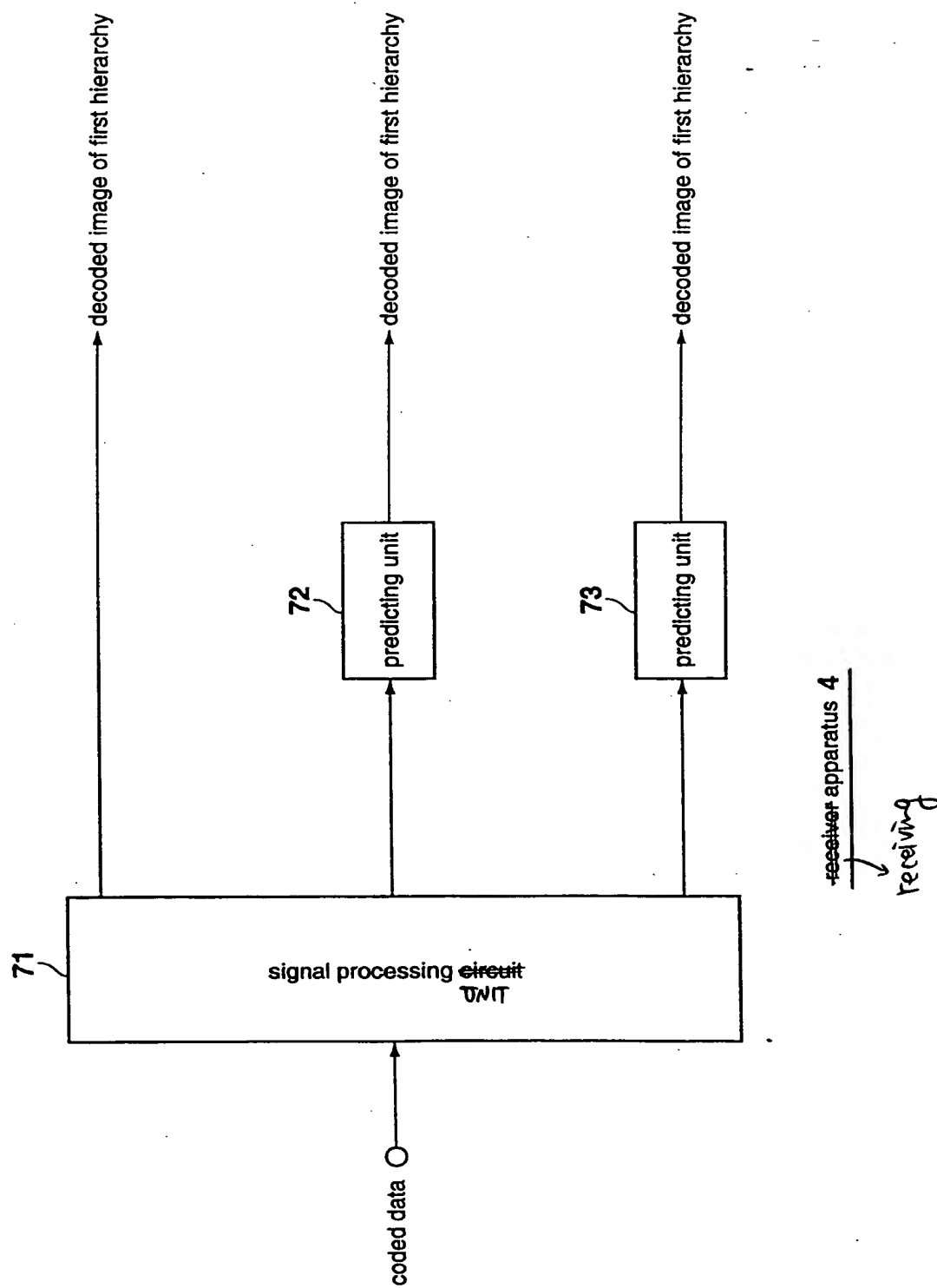




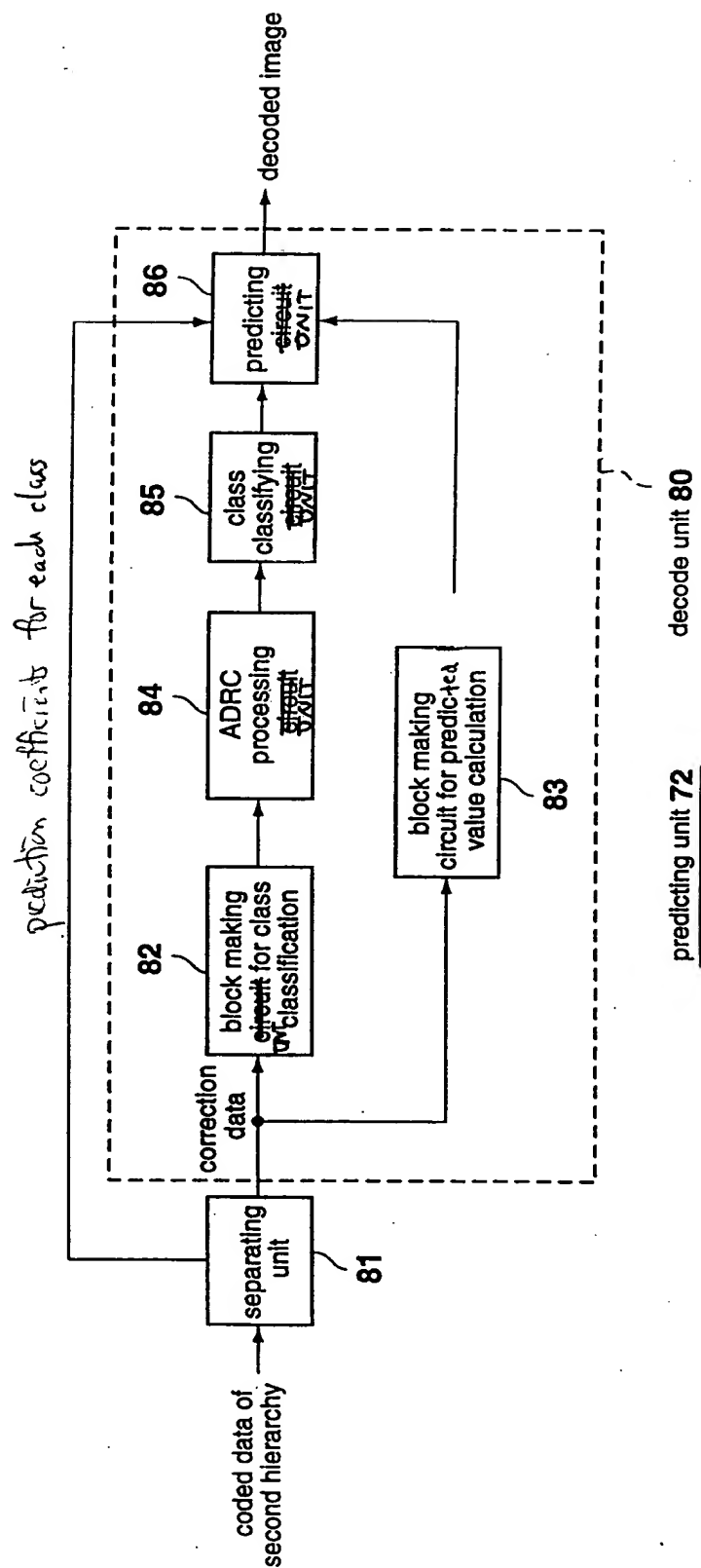
[FIG. 17]



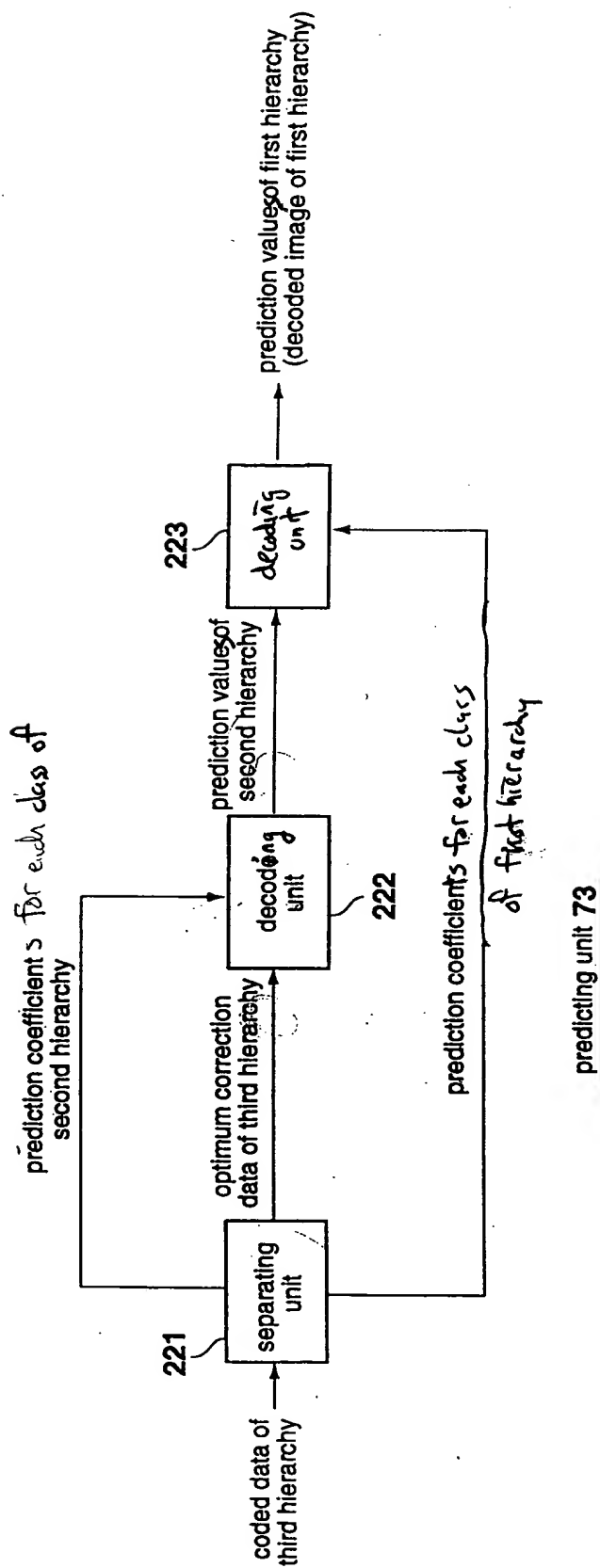
[FIG. 18]



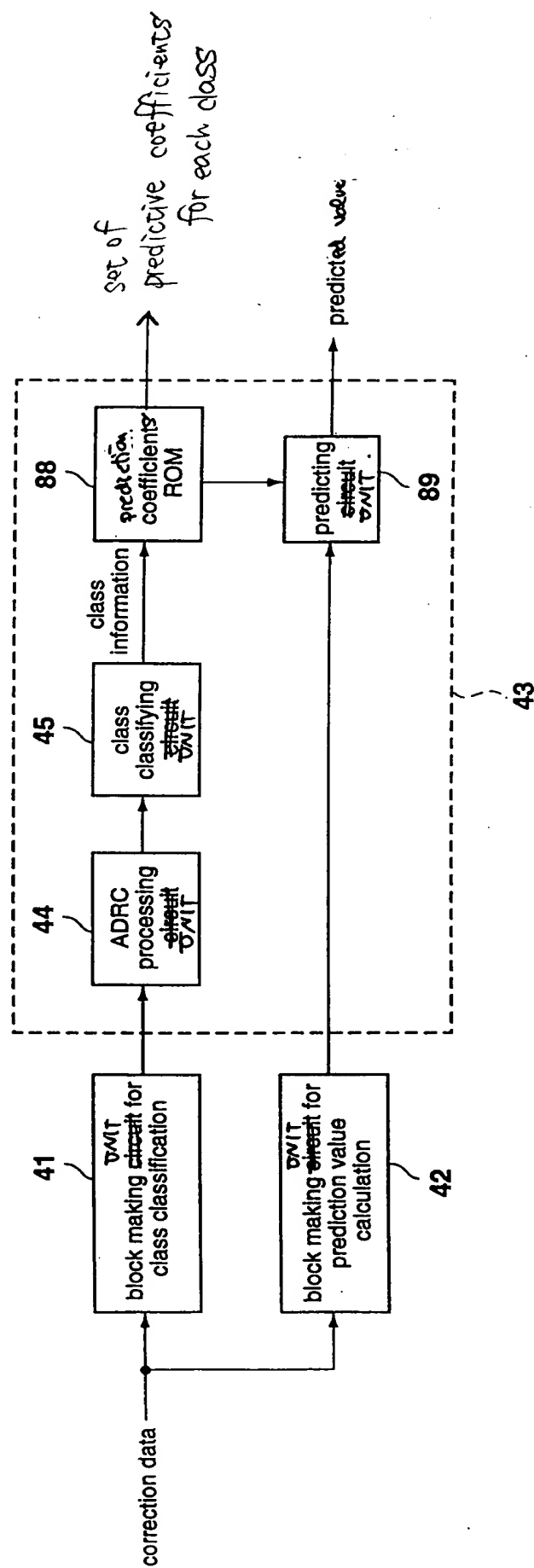
prediction coefficients for each class



[FIG. 20]

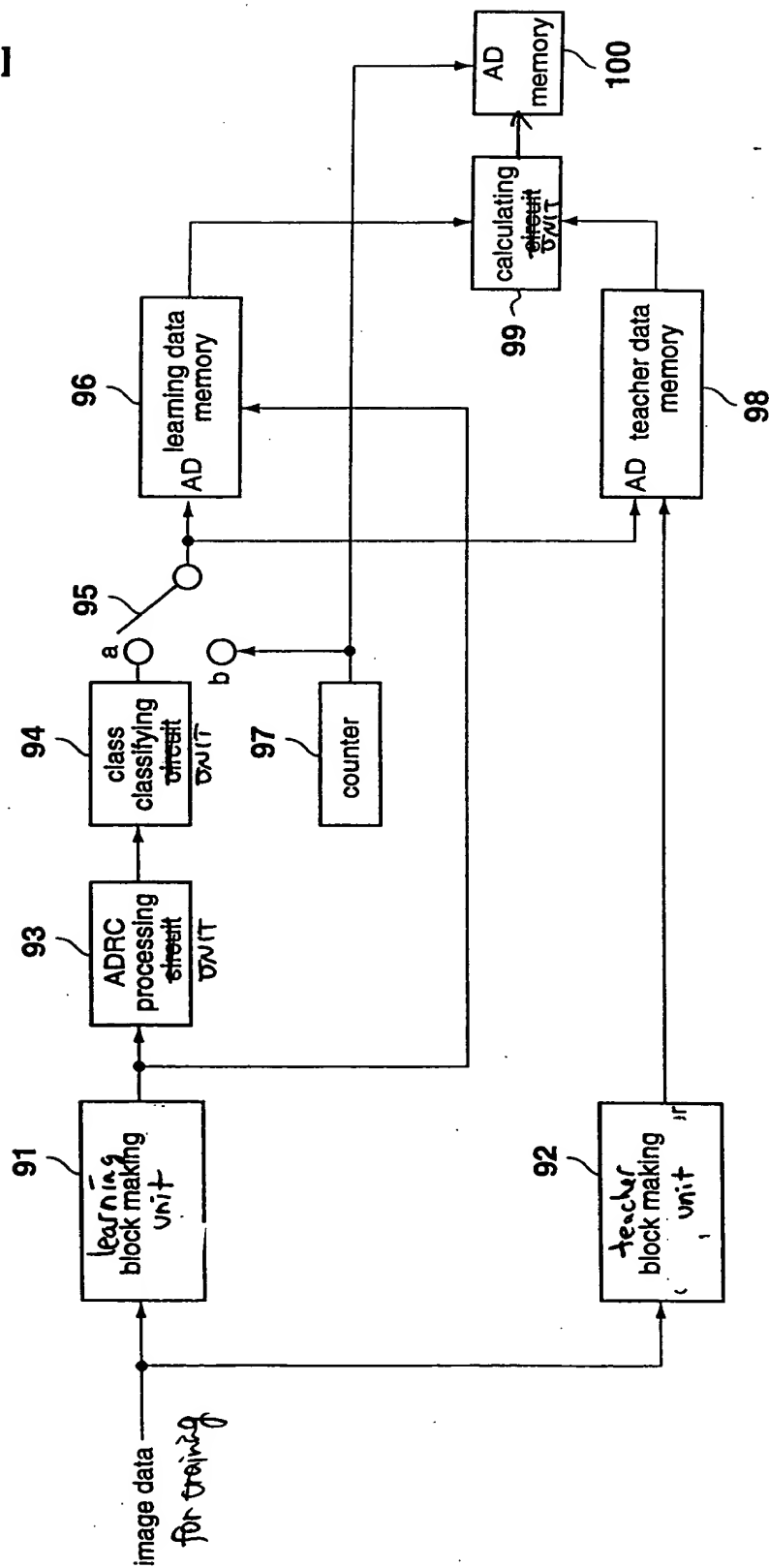


[FIG. 21]

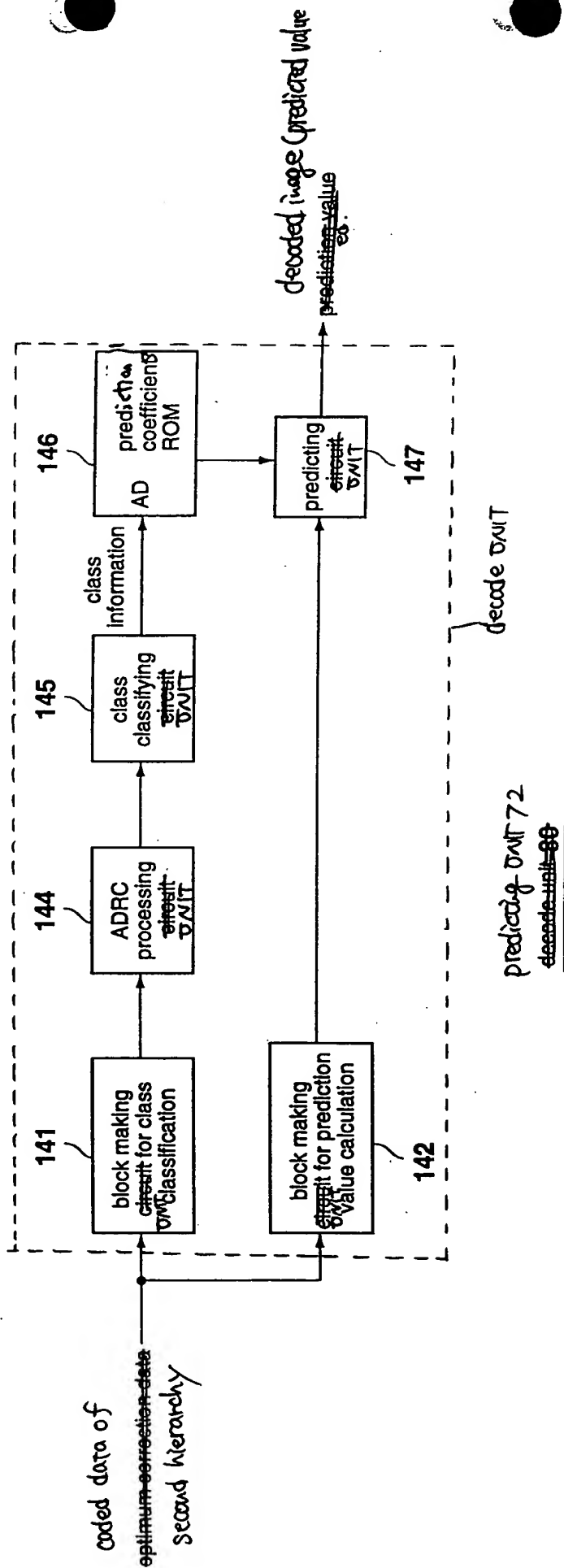


local decoding unit 22

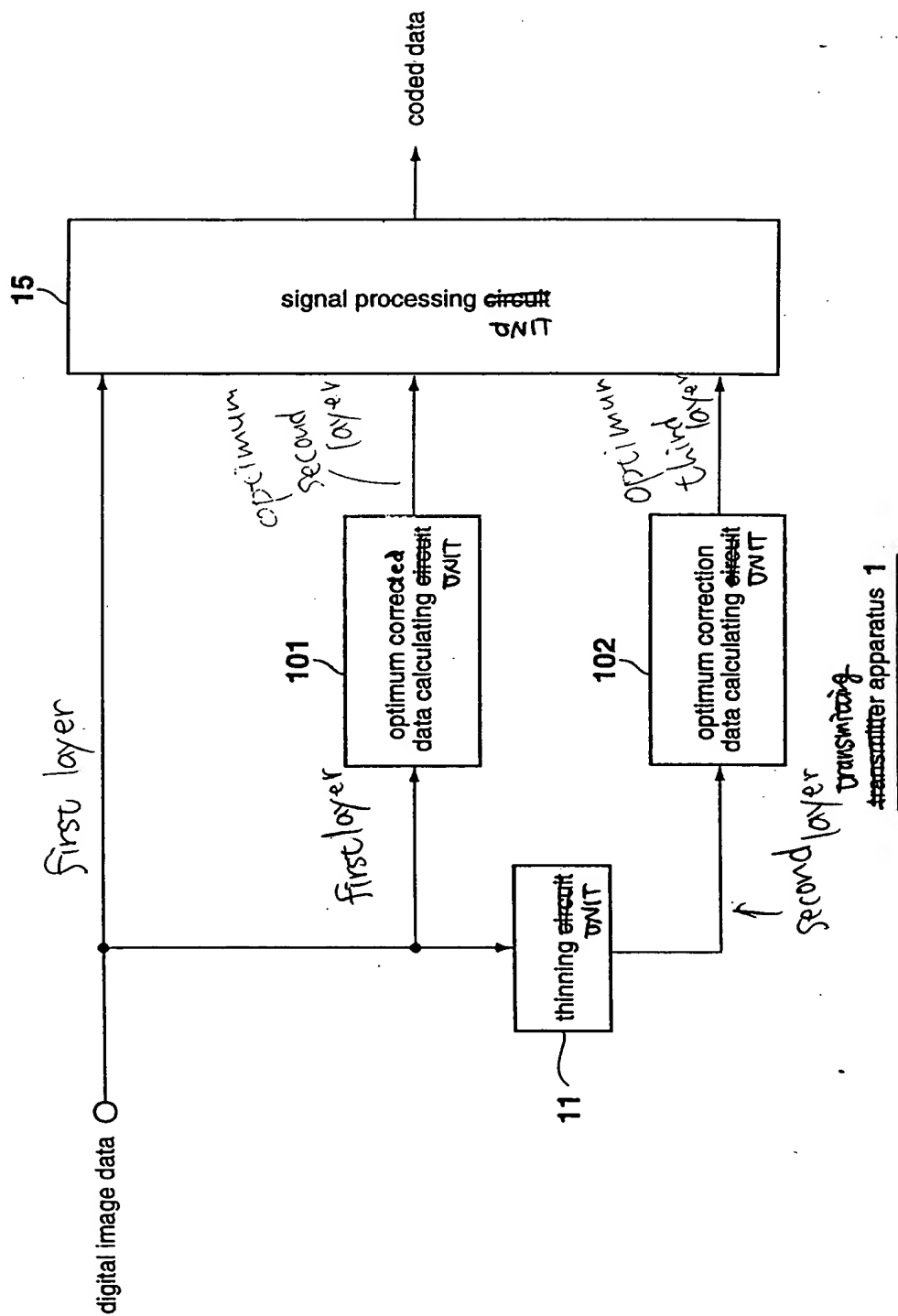
[FIG. 22]



[FIG. 23]

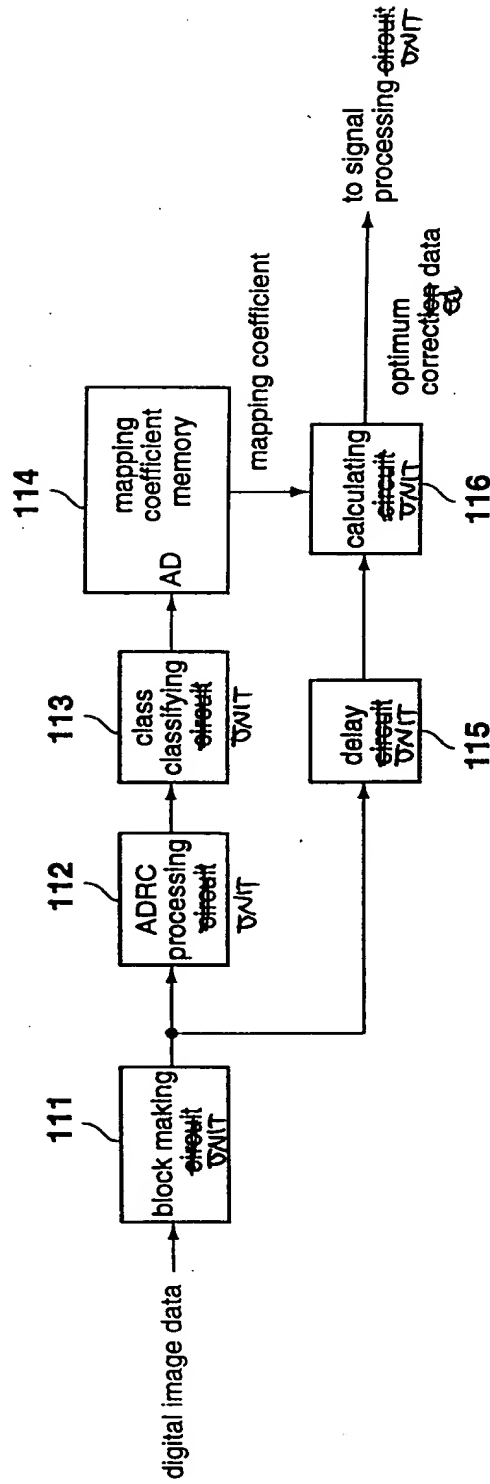


[FIG. 24]



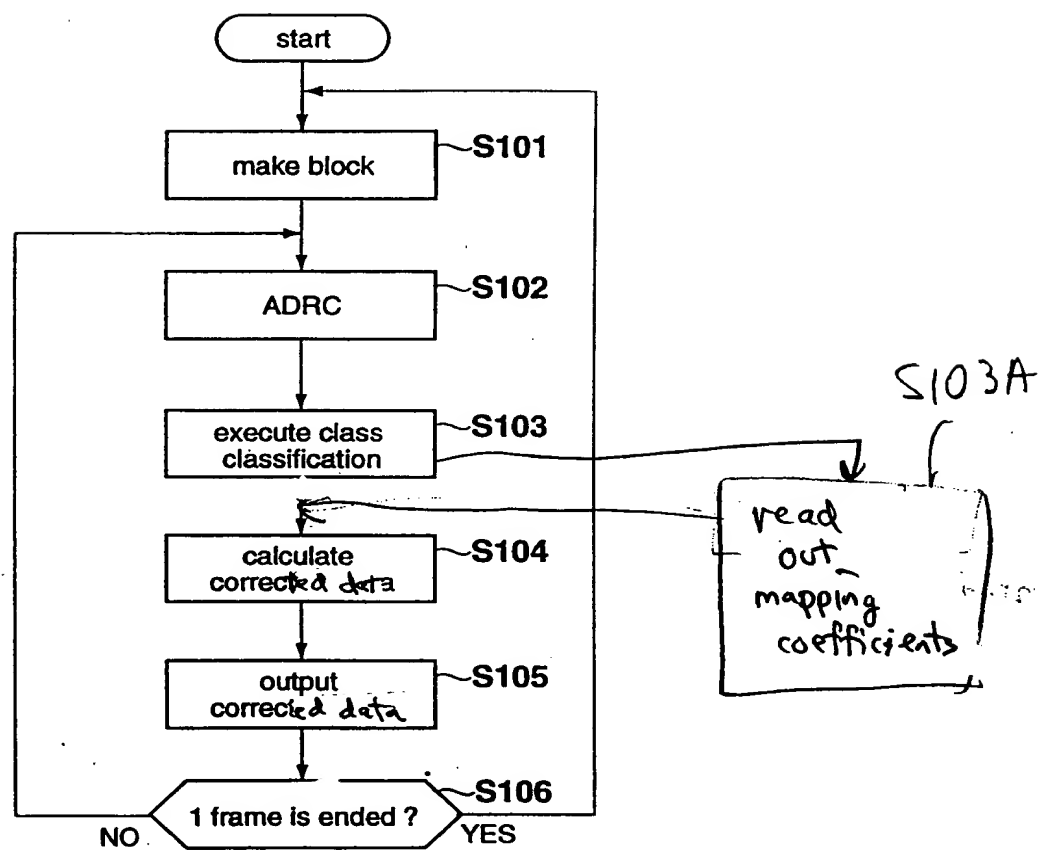


[FIG. 25]

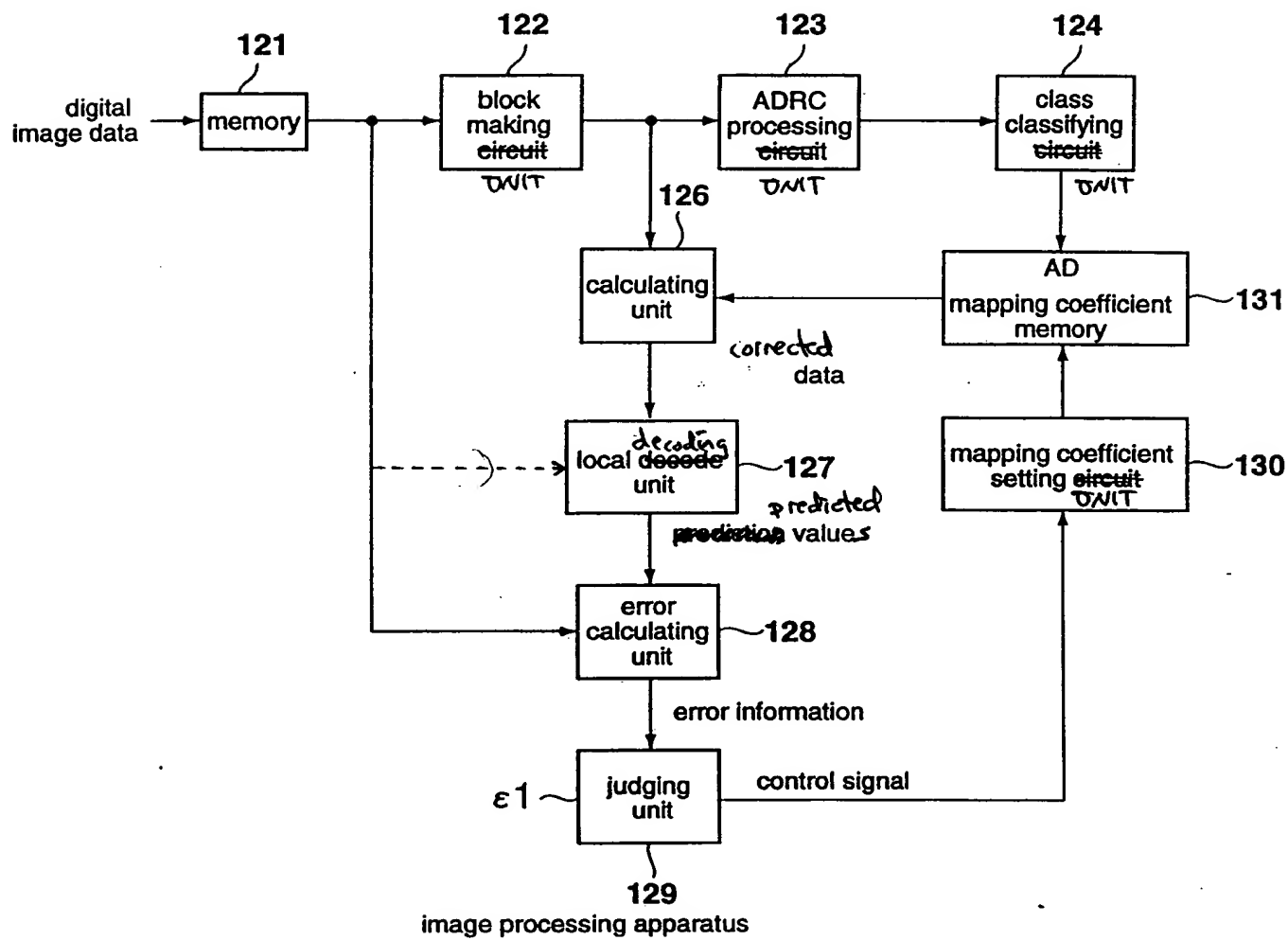


optimum correction data calculating unit 101  
 ( optimum correction data calculating unit 102)

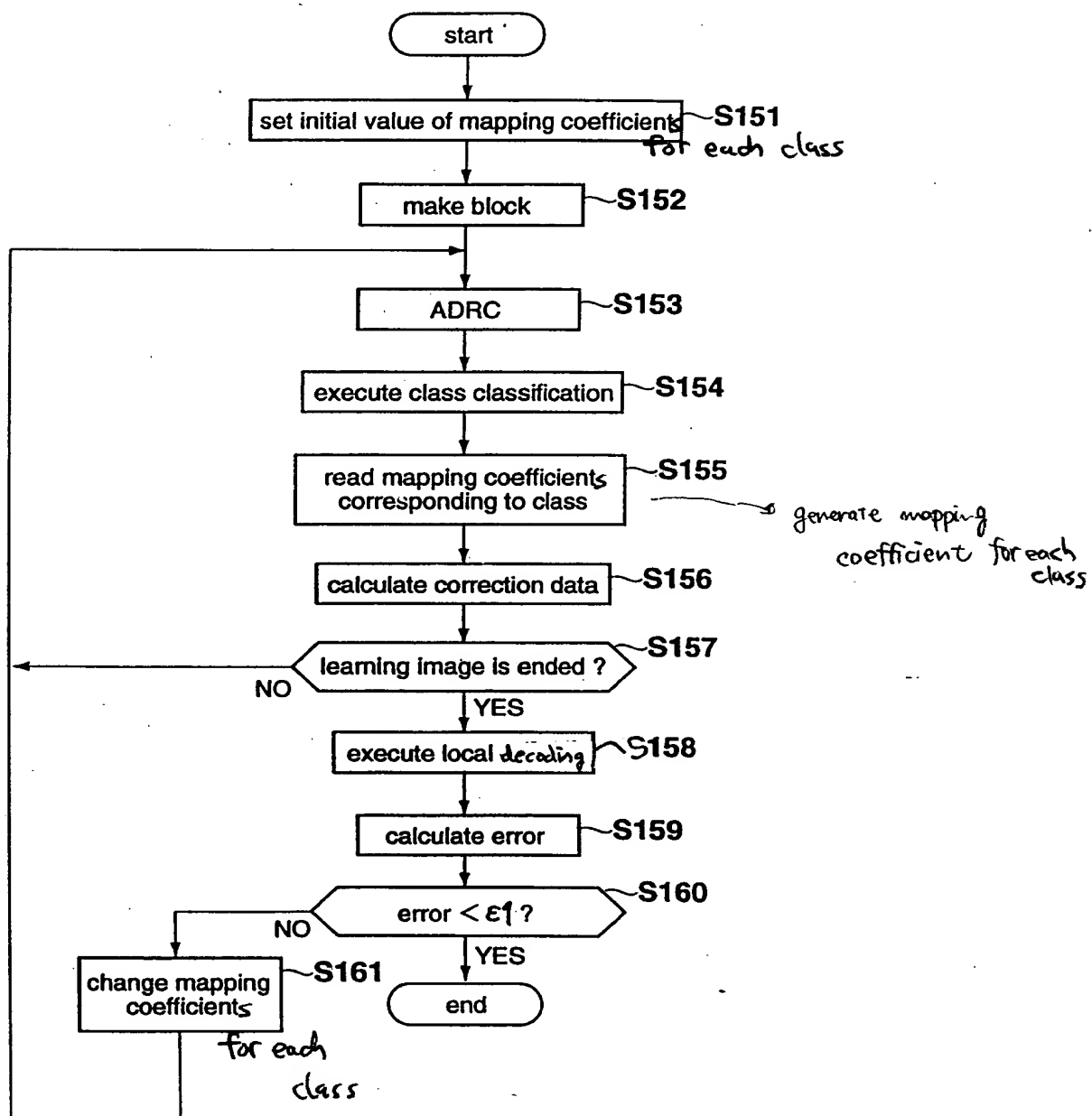
[FIG. 26]



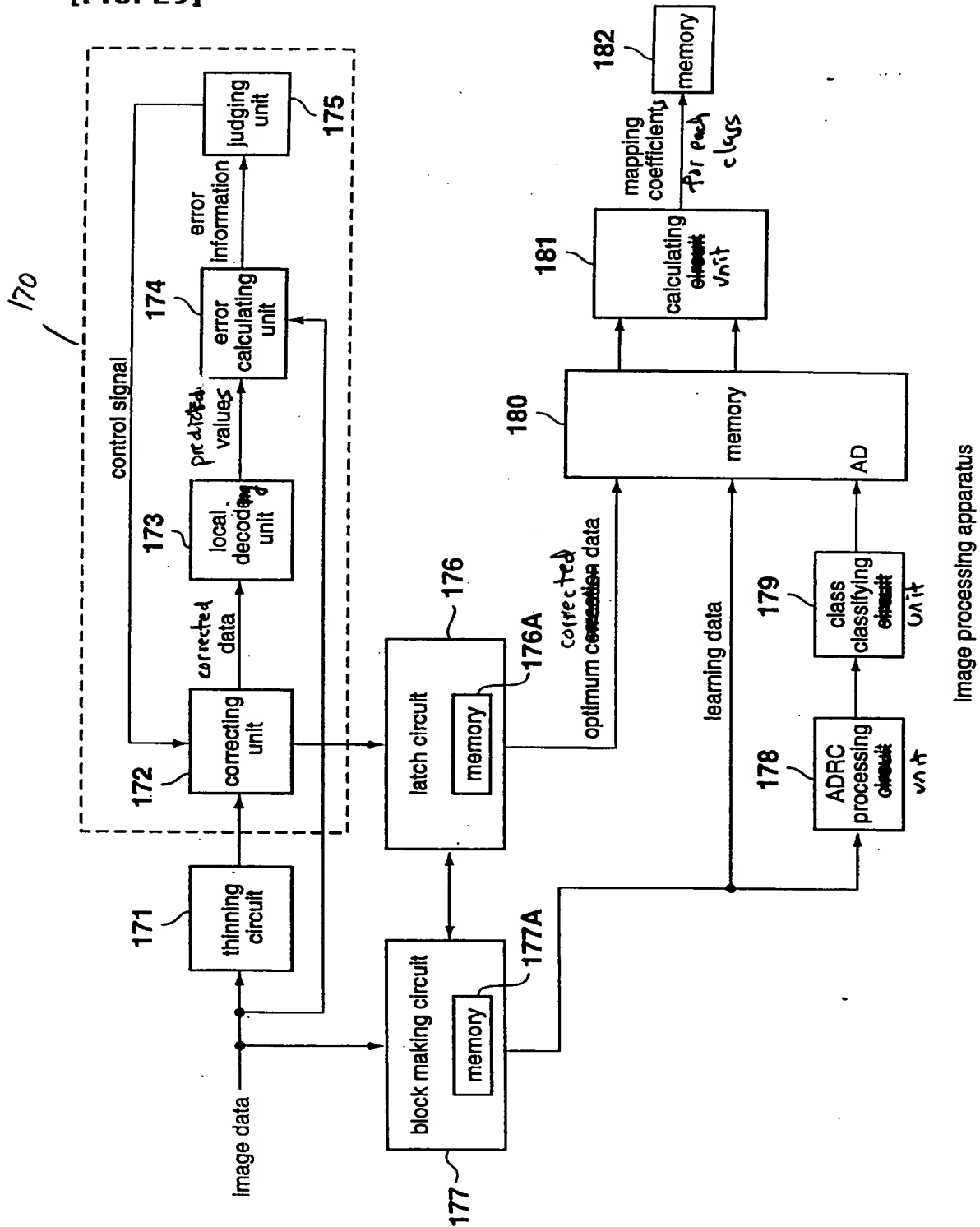
[FIG. 27]



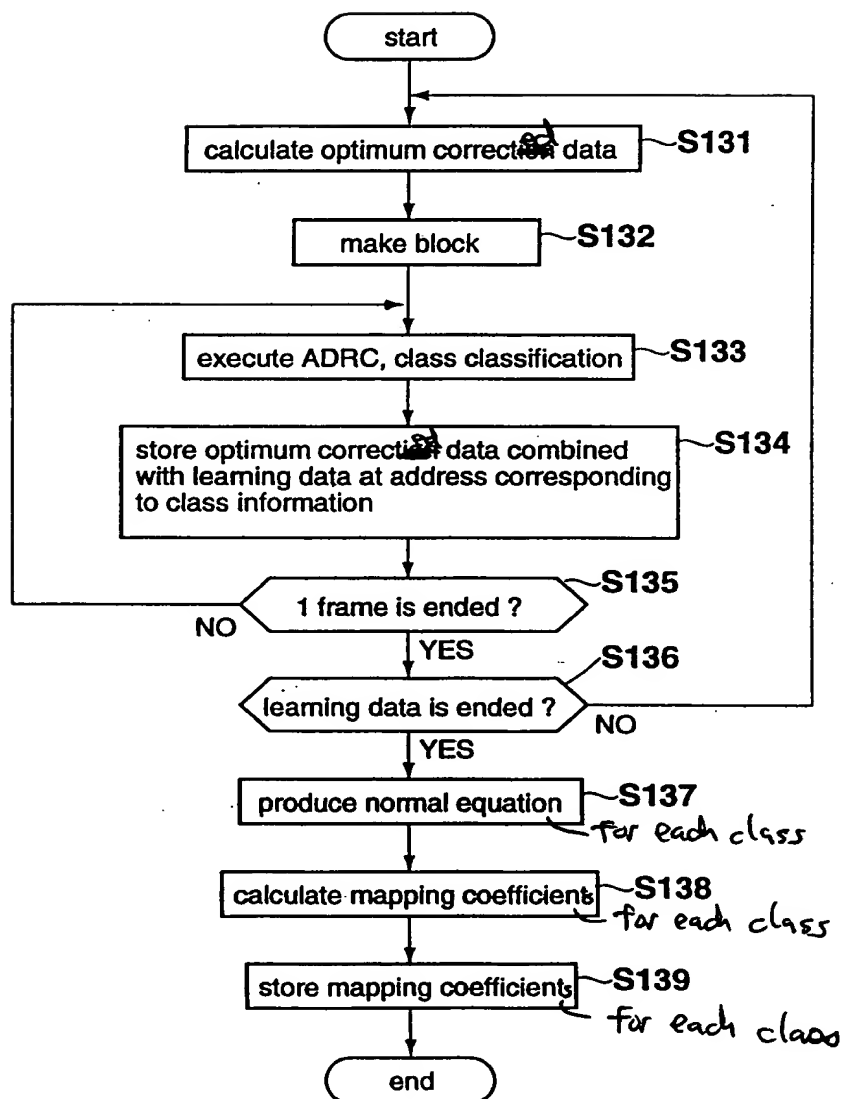
[FIG. 28]

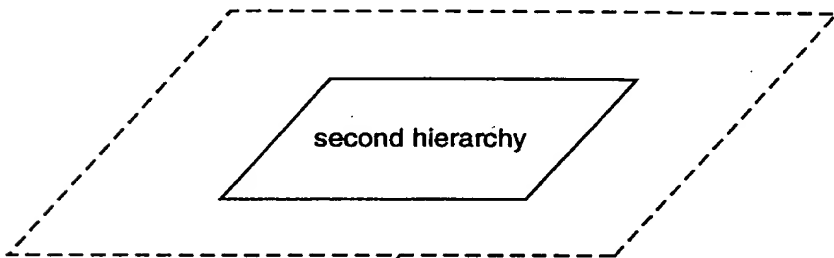
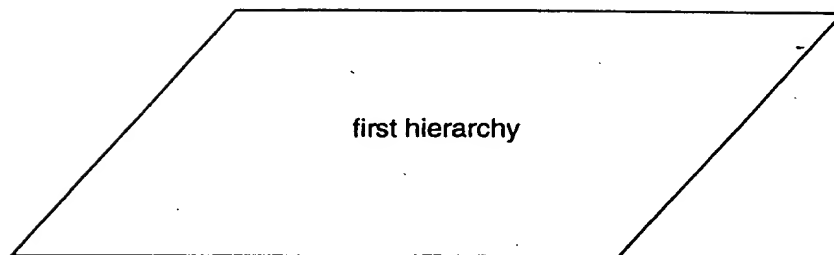


[FIG. 29]

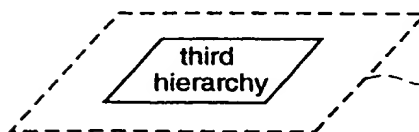
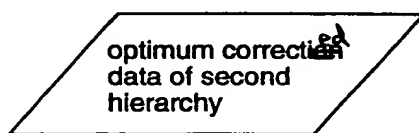


[FIG. 30]





prediction values of first layer

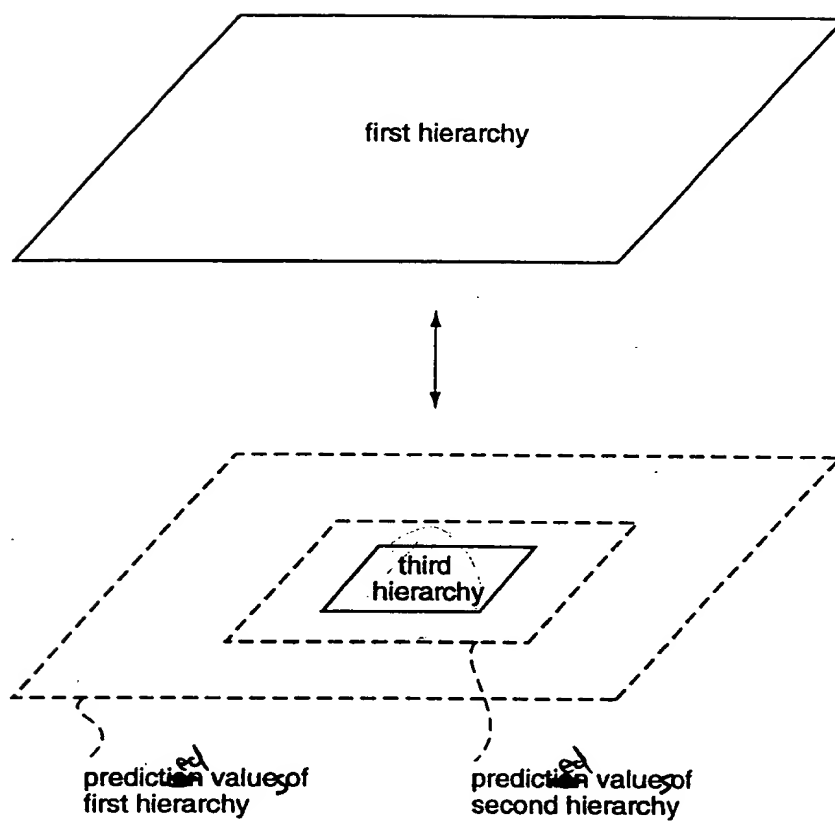


prediction values of second layer

FIG. 31A

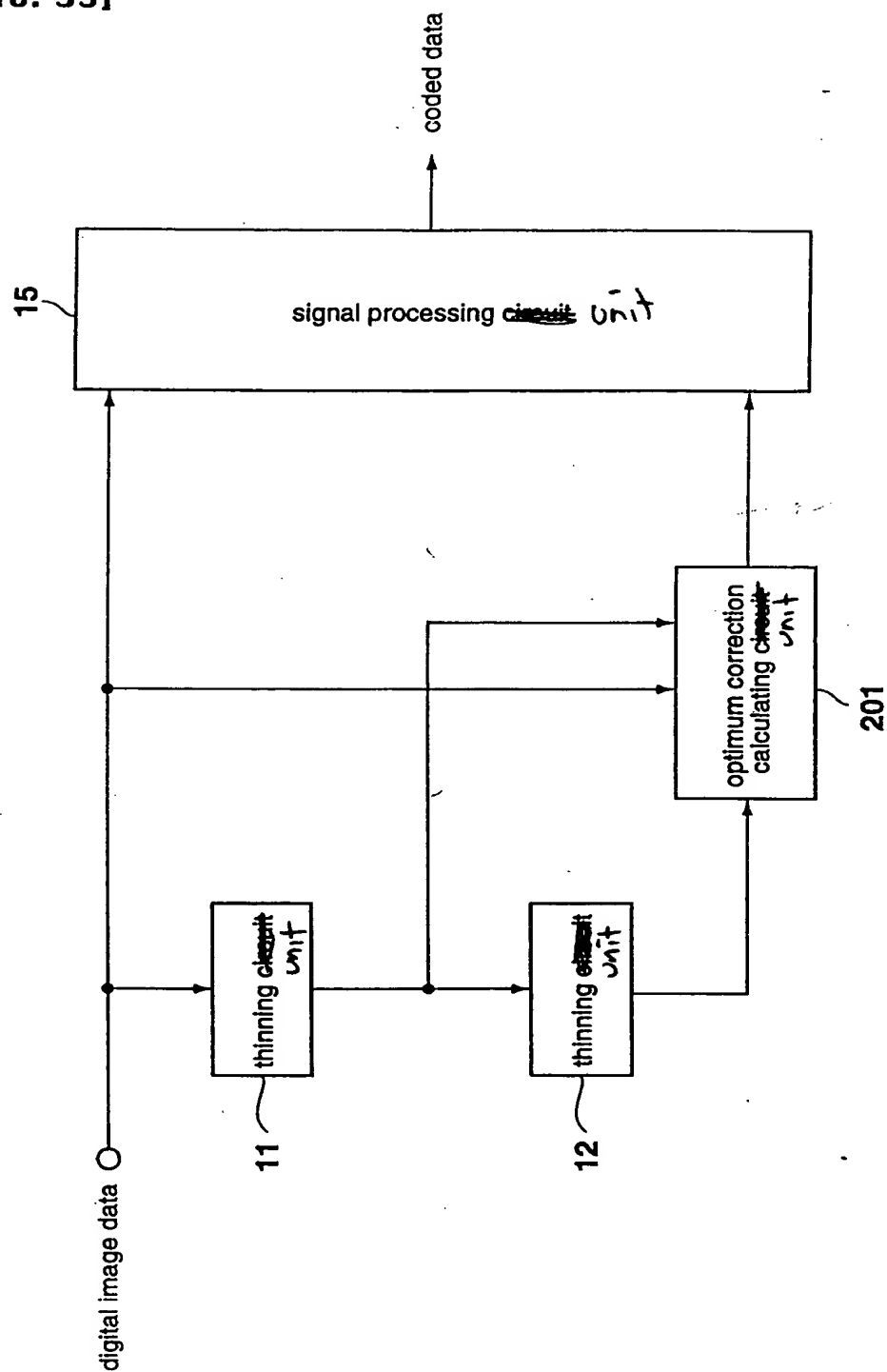
FIG. 31B

[FIG. 32]

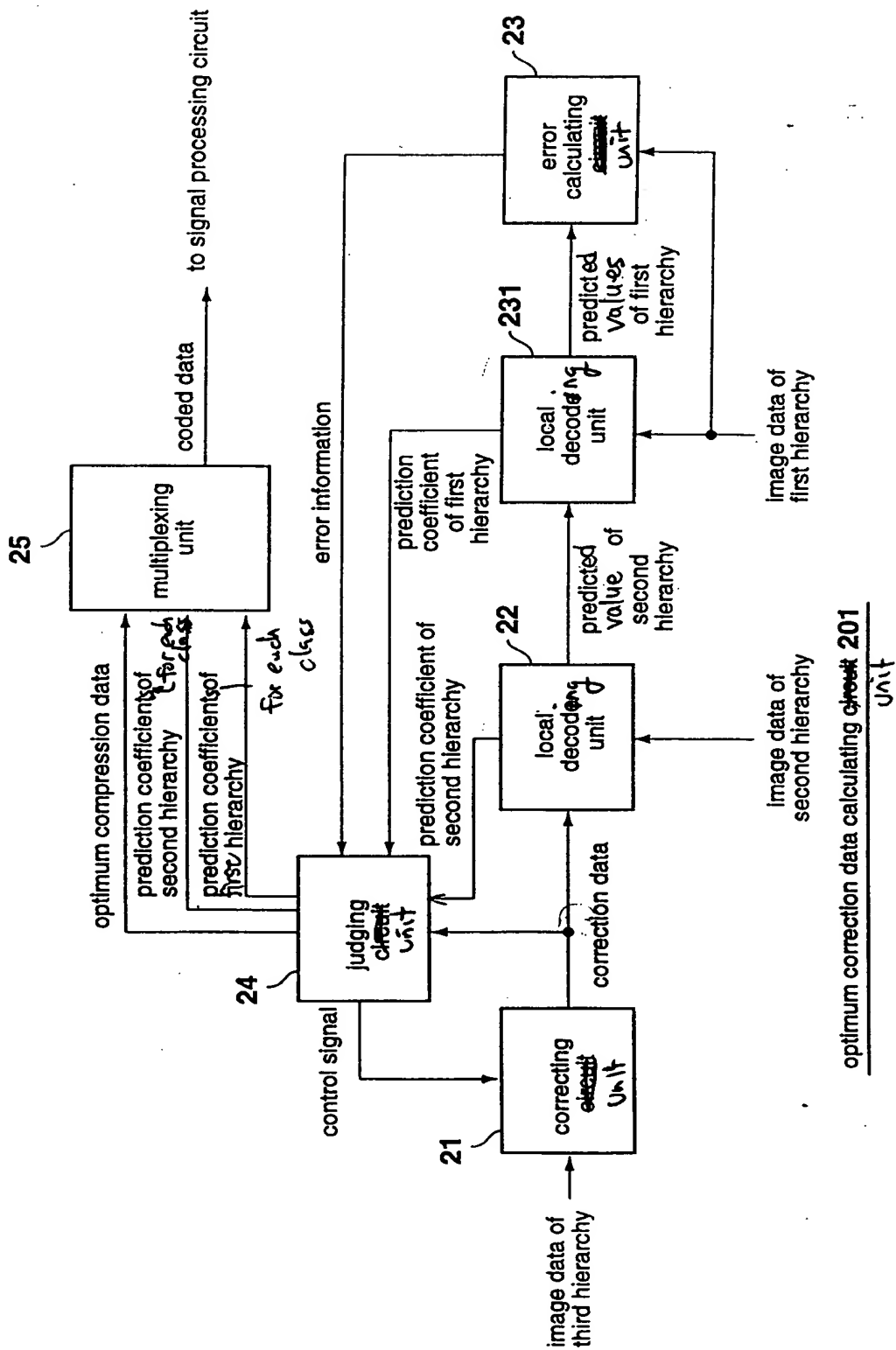




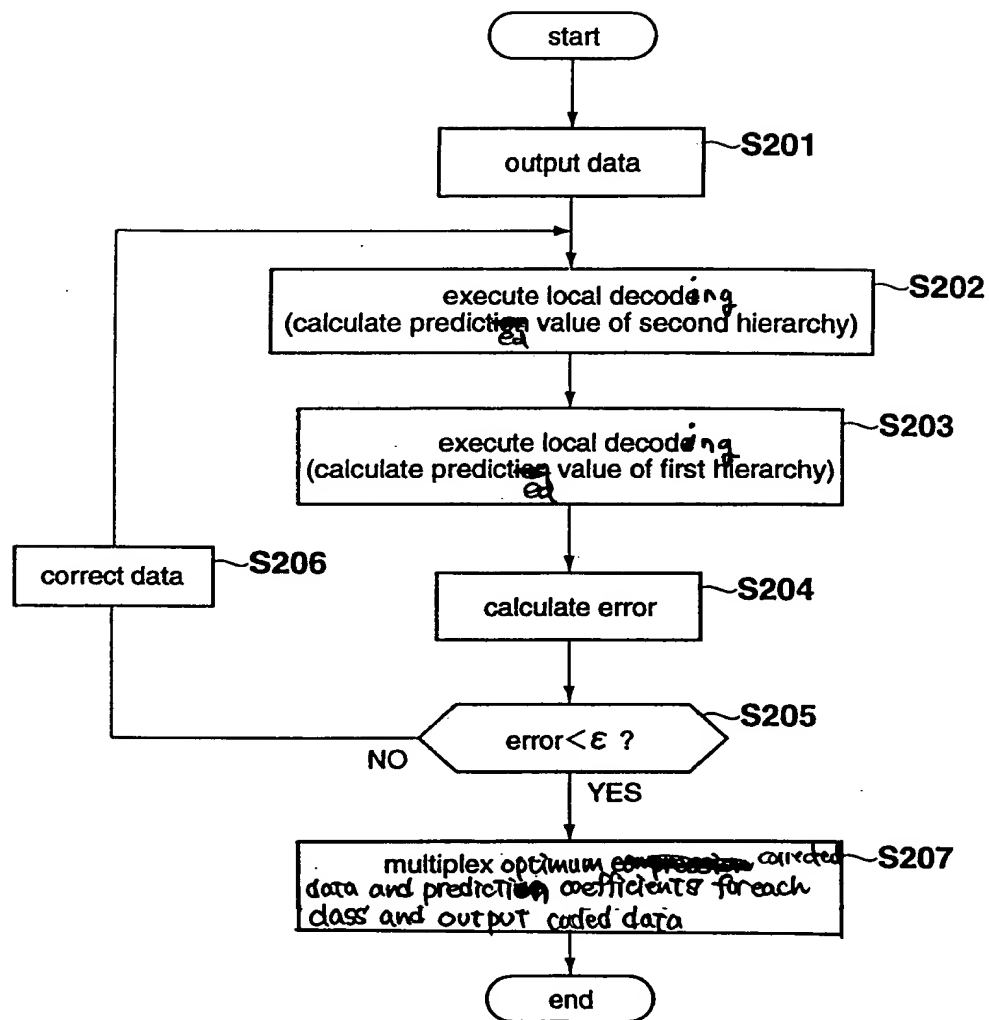
[FIG. 33]



[FIG. 34]

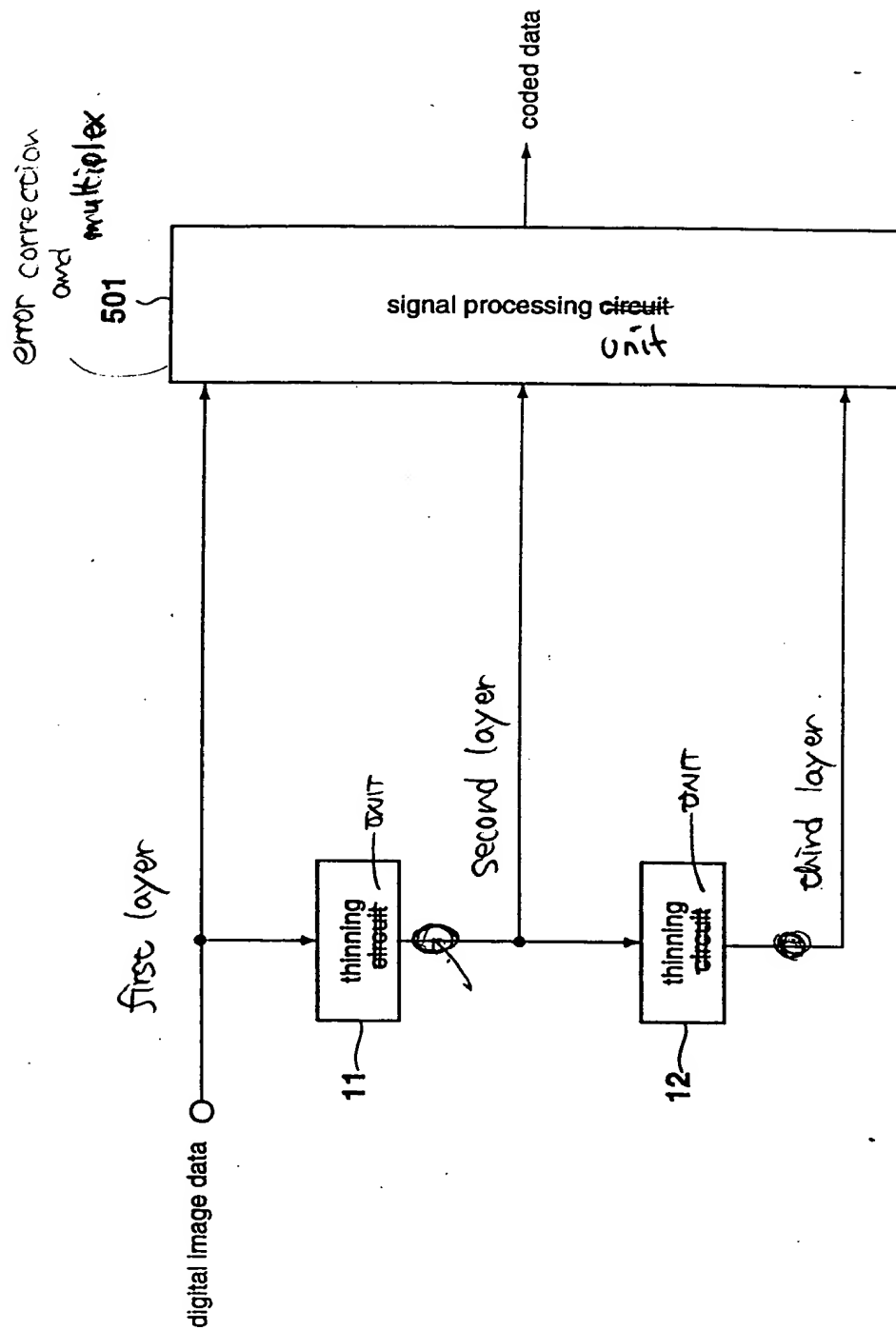


[FIG. 35]



# Related ART

[FIG. 36]



Related ART

[FIG. 37]

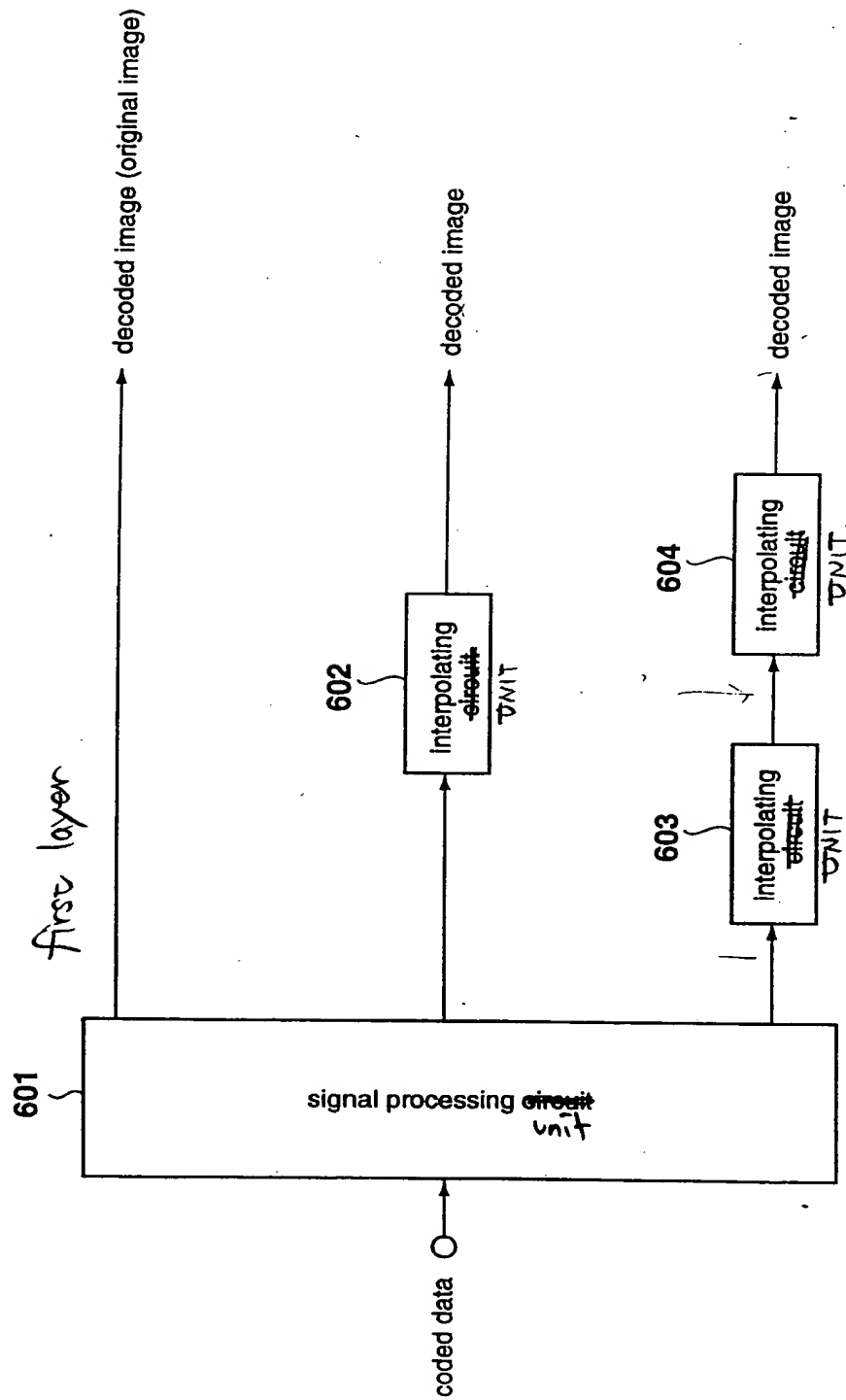




FIG. 39

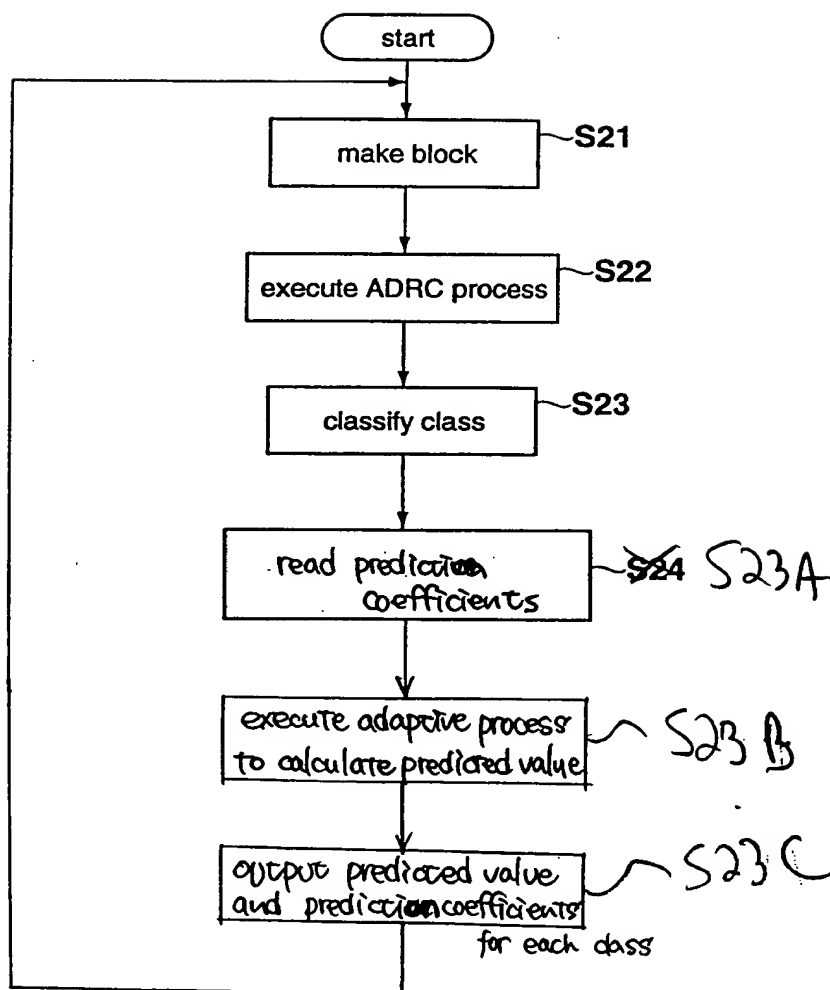


FIG. 40

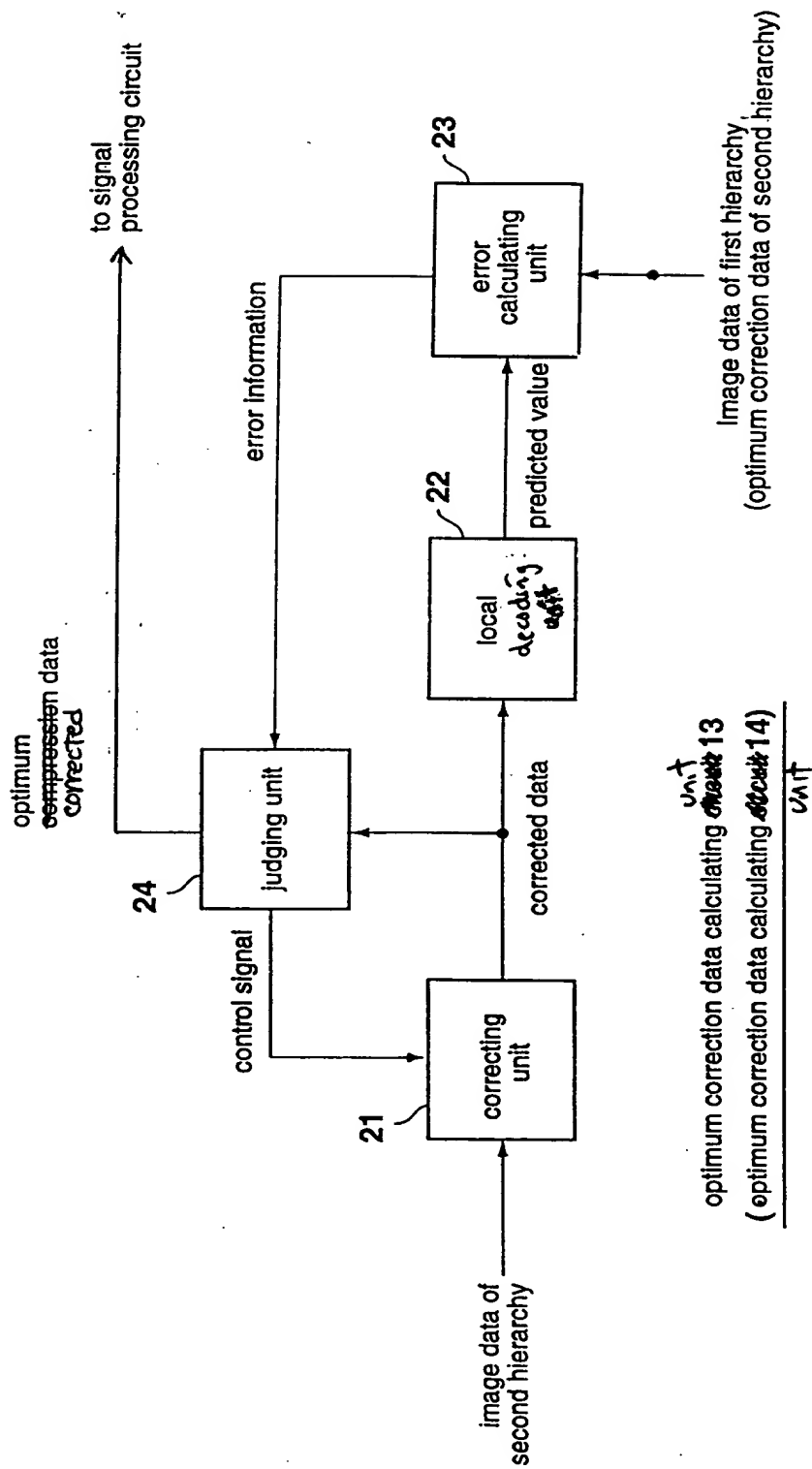
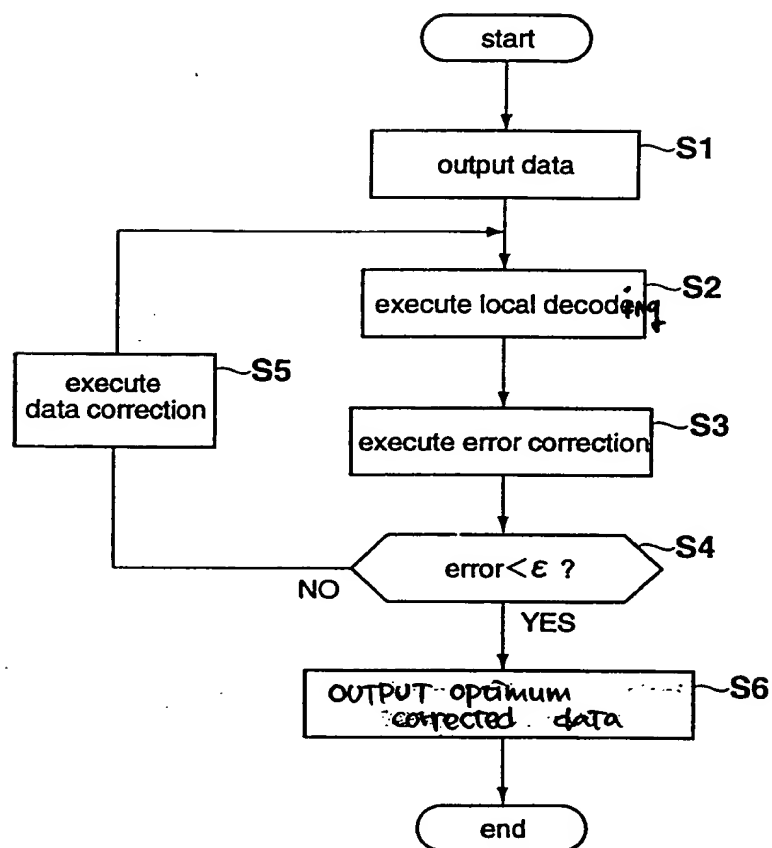
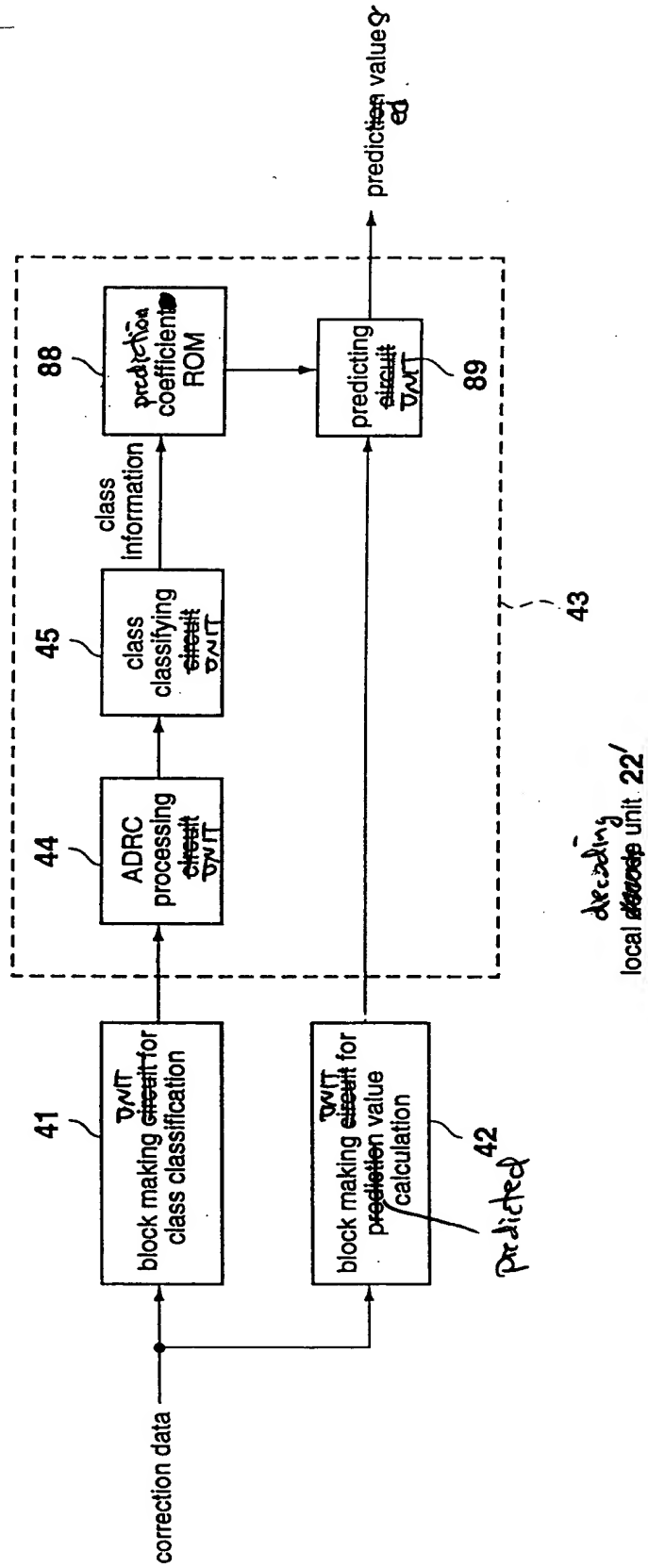




FIG. 41





decoding  
local decoding unit 22'

FIG. 42

FIG. 43

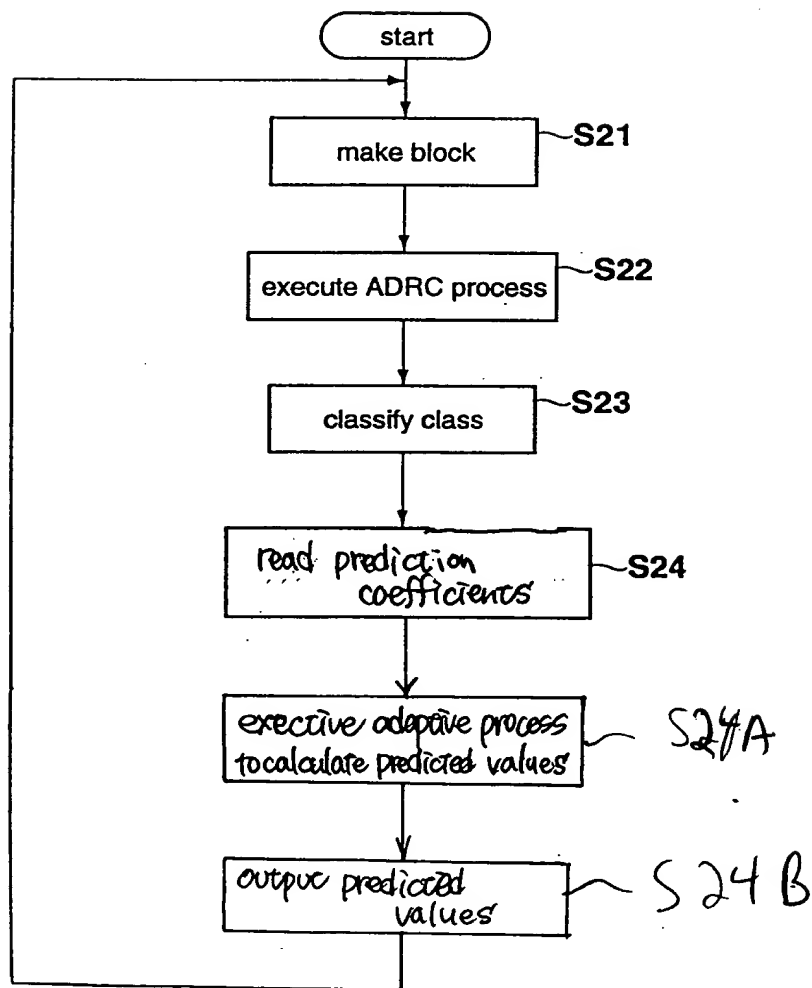


FIG. 44

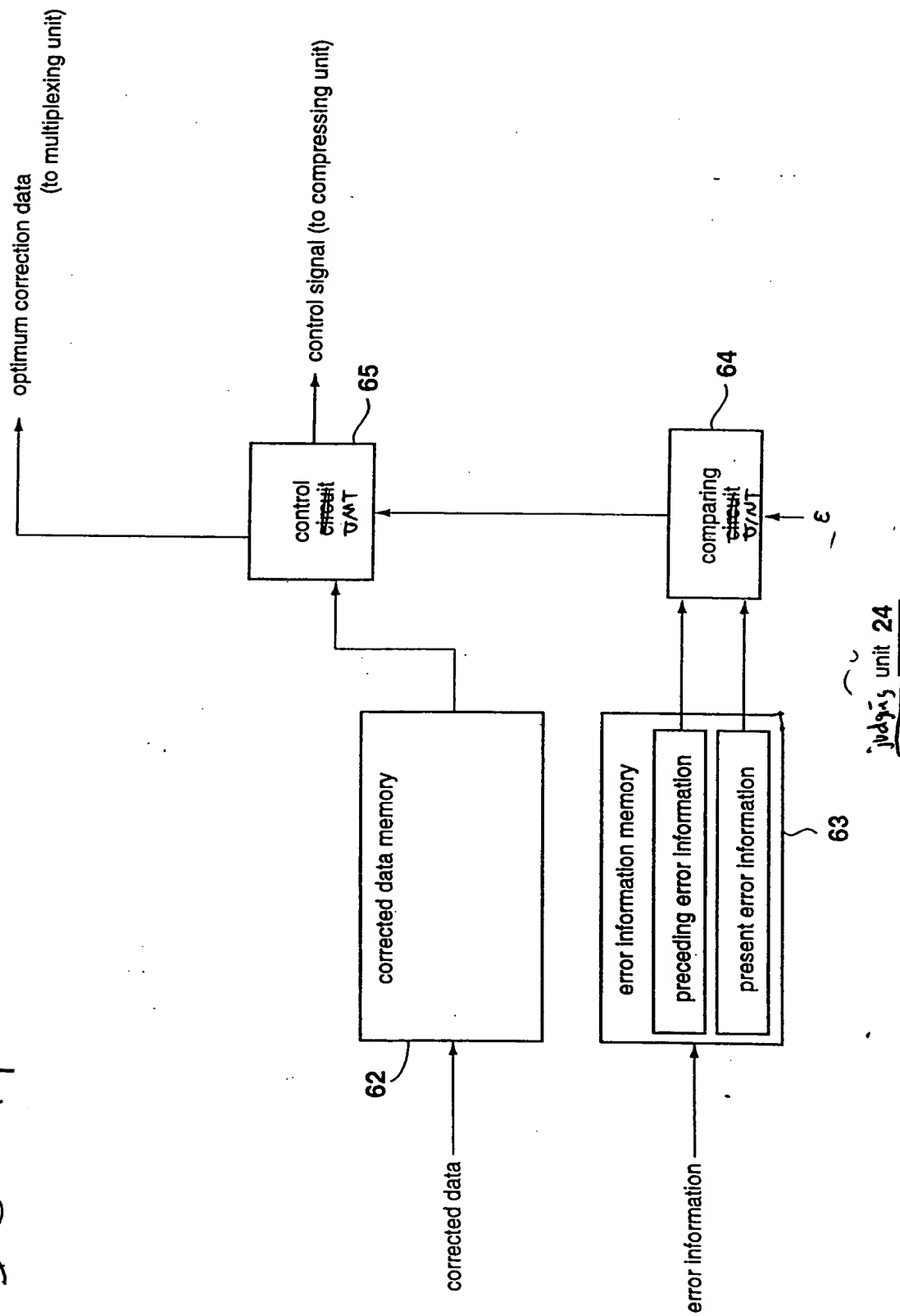


FIG. 45

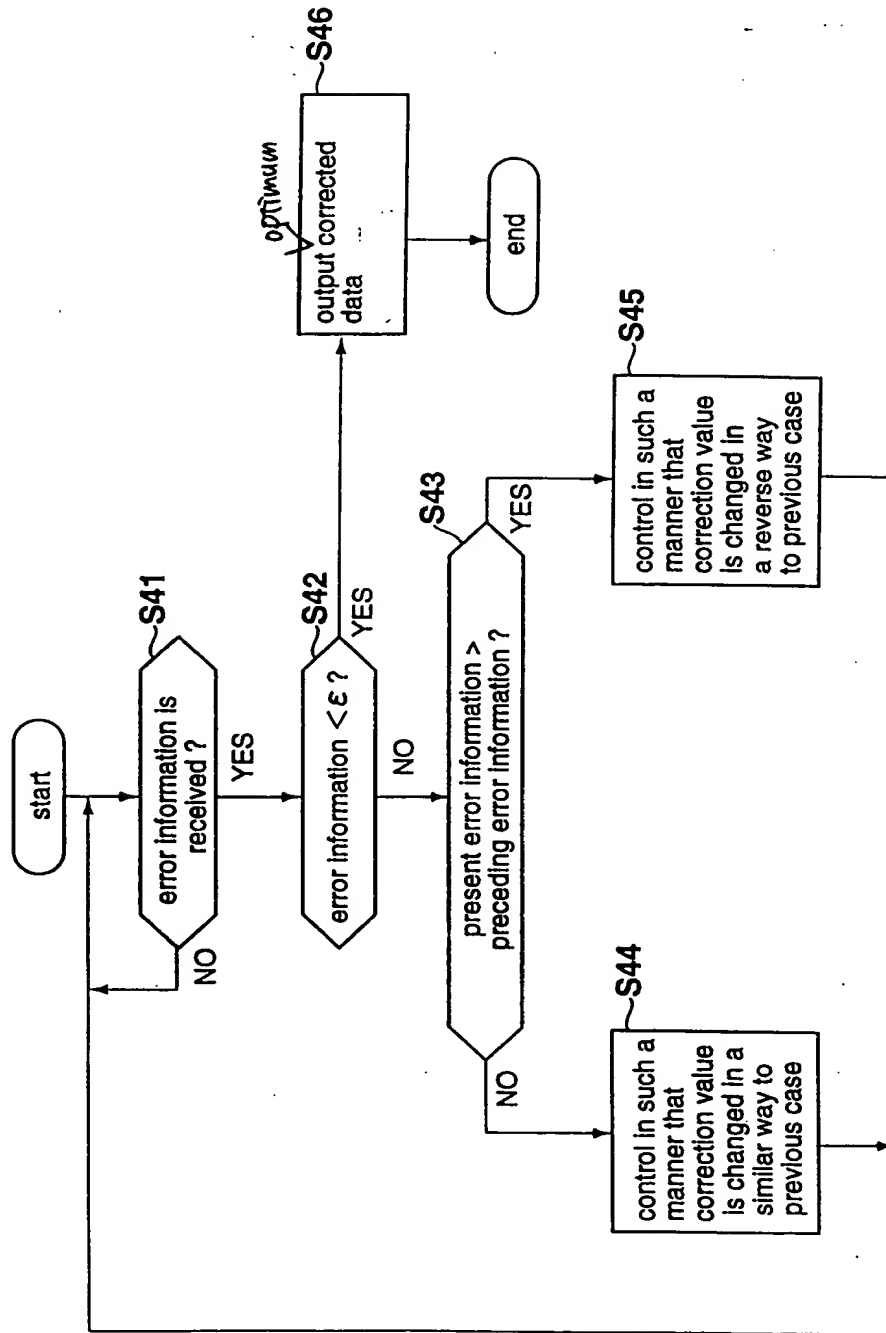
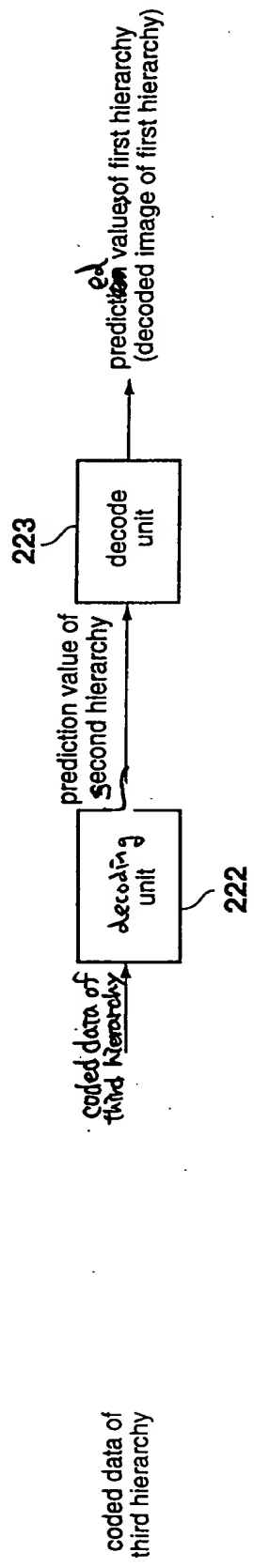


FIG. 46 is a block diagram of a predicting unit 73 according to the present invention. The predicting unit 73 includes a decoding unit 222 and a decode unit 223. The decoding unit 222 receives coded data of third hierarchy and outputs prediction value of second hierarchy. The decode unit 223 receives the prediction value of second hierarchy and outputs prediction values of first hierarchy (decoded image of first hierarchy).



predicting unit 73

FIG. 46

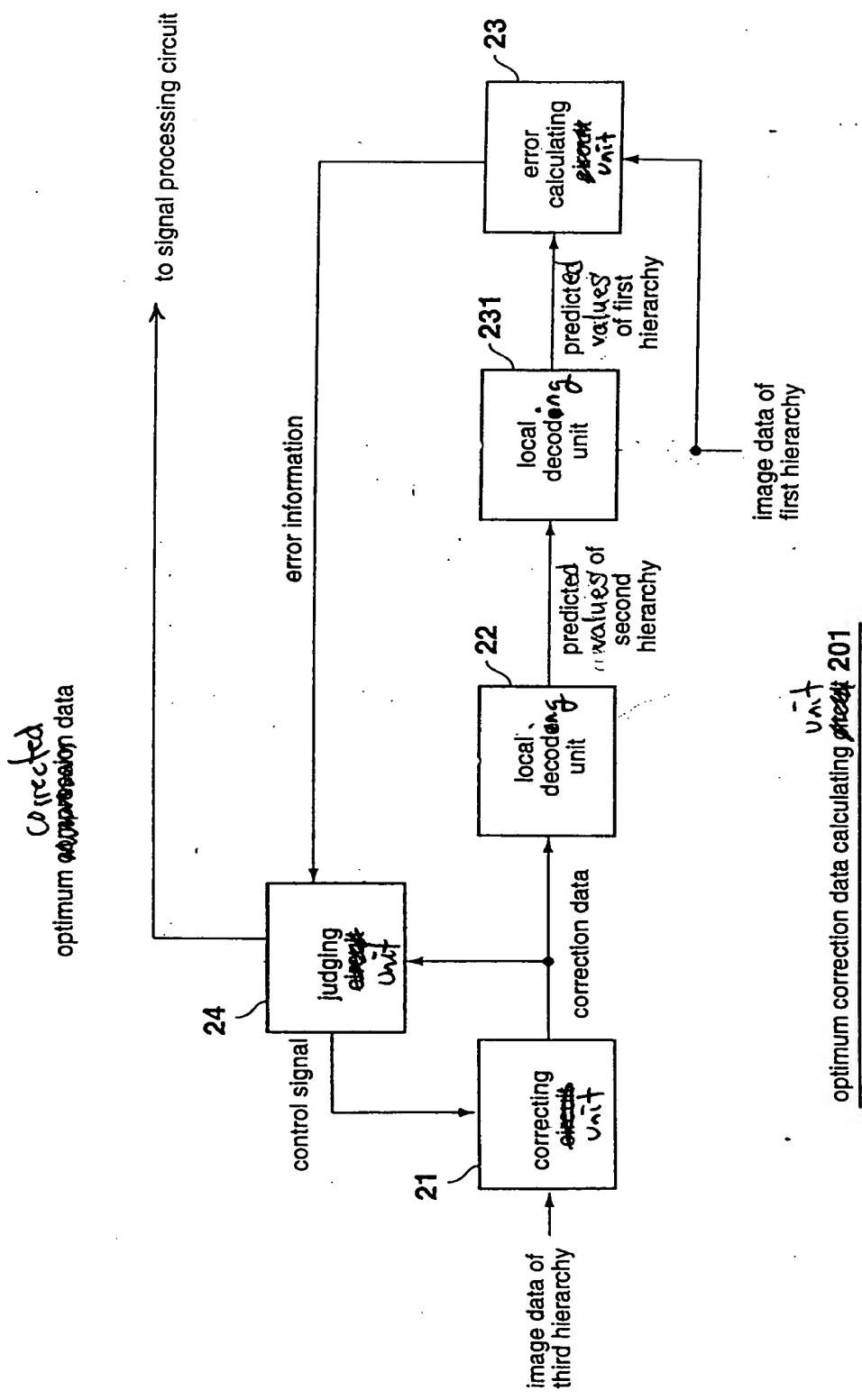


FIG. 47

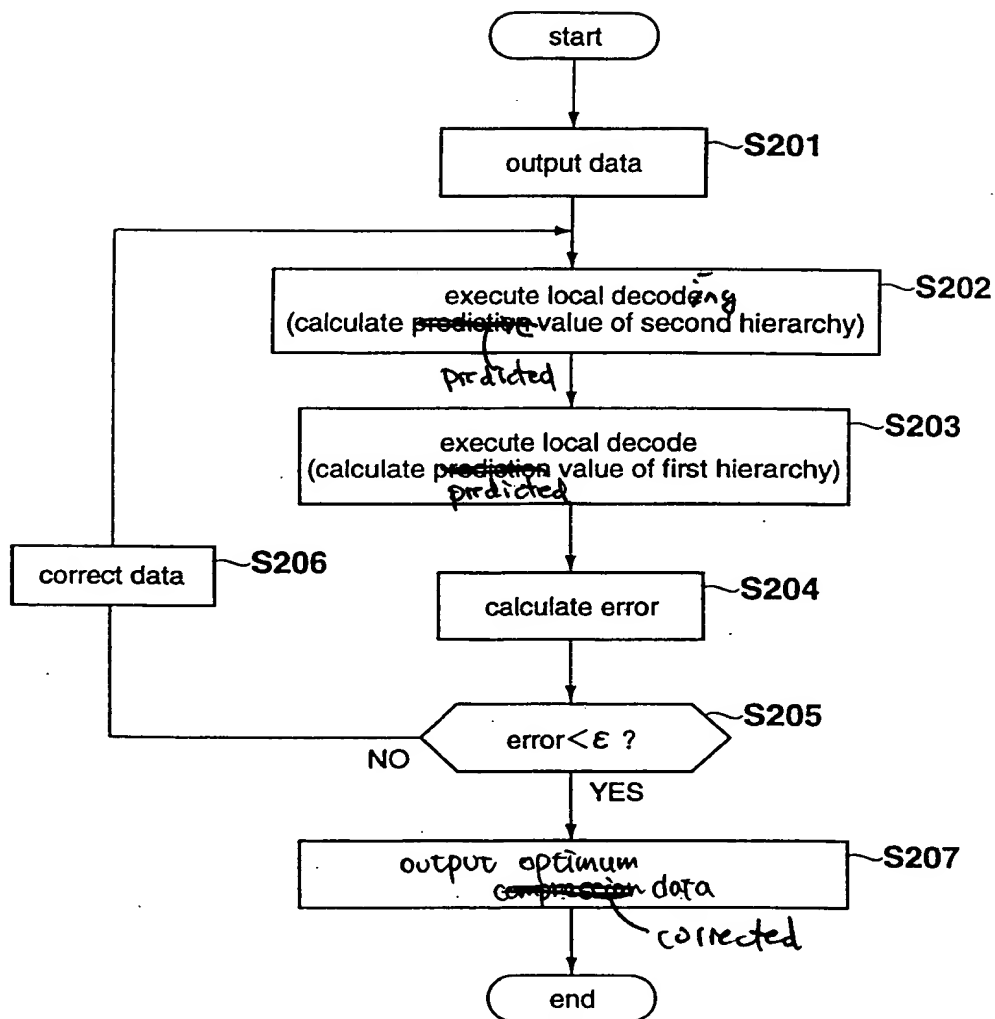


FIG. 48